



Test Report No: 2430454R-RFUSV17S-A

# RF EXPOSURE EVALUATION DECLARATION

Product Name	EPD Monitor
Brand Name	AGILE, Engage MediaBoard
Model No.	ESX32LNLd, ESX32LNLc, Engage MediaBoard 32W, Jetblack
FCC ID	2AYHFM8821CU1
Applicant's Name / Address	Agile Display Solutions Co., Ltd No. 12, Jingzhong Rd., Yongkang Dist., Tainan City, 710 Taiwan
Manufacturer's Name	Agile Display Solutions Co., Ltd
Test Method Requested, Standard	FCC CFR Title 47 Part 2.1091 Radiofrequency radiation exposure evaluation: mobile devices.
Verdict Summary	IN COMPLIANCE
Documented by Genie Chang	Grente Chang
Tested by Alan Chen	Spente Chang  Man Chen  Tim Sung
Approved by Tim Sung	Tim Sung
Date of Receipt	2024/03/15
Date of Issue	2024/05/08
Report Version	V1.0



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#### **Competences and Guarantees**

DEKRA is a testing laboratory competent to carry out the tests described in this report.

In order to assure the traceability to other national and international laboratories, DEKRA has a calibration and maintenance program for its measurement equipment.

DEKRA guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated in the report and it is based on the knowledge and technical facilities available at DEKRA at the time of performance of the test.

DEKRA is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

The results presented in this Test Report apply only to the particular item under test established in this document.

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#### **General Conditions**

- 1. The test results relate only to the samples tested.
- 2. The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.
- 3. This report must not be used to claim product endorsement by TAF or any agency of the government.
- 4. The test report shall not be reproduced without the written approval of DEKRA Testing and Certification Co., Ltd.
- Measurement uncertainties evaluated for each testing system and associated connections are given here to
  provide the system information for reference. Compliance determinations do not take into account
  measurement uncertainties for each testing system, but are based on the results of the compliance
  measurement.



# **Revision History**

Version	Description	Issued Date
V1.0	Initial issue of report	2024/05/08



#### 1. General Information

## 1.1. EUT Description

Product Name	EPD Monitor
Brand Name	AGILE,
	Engage MediaBoard
Model No.	ESX32LNLd, ESX32LNLc,
	Engage MediaBoard 32W, Jetblack

Note: For more detailed information please refer to report No.: 2430454R-RFUSV01S-A,

2430454R-RFUSV03S-A and 2430454R-RFUSV18S-A.

The difference for each model is shown as below:

Brand Name	Model No.	Difference	
AGILE	ESX32LNLd	Without Type-C I/O port and charged by battery pack.	
AGILE	ESX32LNLc	Charge with Type-C I/O port.	
Engage MediaBoard	Engage MediaBoard 32W, Jetblack	1.Without Type-C I/O port and charged by battery pack. 2.Different from ESX32LNLd in brand name only.	

From the above models, model: ESX32LNLc was selected as representative model for the test and its data was recorded in this report.

## 1.2. Testing Location Information

USA	FCC Registration Number: TW0033
Canada	CAB Identifier Number: TW3023 / Company Number: 26930

Site Description	Accredited by TAF		
	Accredited Number: 3023		

Test Laboratory	DEKRA Testing and Certification Co., Ltd.
	Linkou Laboratory
Address	No. 5-22, Ruishukeng Linkou District, New Taipei City, 24451, Taiwan, R.O.C.
Performed Location	No. 26, Huaya 1st Rd., Guishan Dist.,Taoyuan City 333411, Taiwan, R.O.C.
Phone Number	+886-3-275-7255
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# 2. RF Exposure Evaluation

### 2.1. Test Limit

(A) Test Limit for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm²)	Averaging Time  E ², H ² or S (minutes)
0.3-3.0	614	1.63	*(100)	<6
3.0-30	1842/f	4.89/f	*(900/f <sup>2</sup> )	<6
30-300	61.4	0.163	1.0	<6
300-1500	-	-	f/300	<6
1500-100,000	-	-	5	<6

(B) Test Limit for General Population / Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)		
0.3-1.34	614	1.63	*(100)	<30
1.34-30	824/f	2.19/f	*(180/f²)	<30
30-300	27.5	0.073	0.2	<30
300-1500	-	-	f/1500	<30
1500-100,000	-	-	1.0	<30

Note: f = frequency in MHz; \*Plane-wave equivalent power density

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Power Density (S) is calculated by the following formula:

 $S=(P*G)/4\pi R^2$ 

where:

S = power density (in appropriate units, e.g. mW/ cm<sup>2</sup>)

P = power input to the antenna (in appropriate units, e.g., mW)

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

 $\pi = 3.1416$ 

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)



# 2.2. Test Result of RF Exposure Evaluation

Band	Maximum conducted output power (dBm)	Antenna Gain (dBi)	E.I.R.P (dBm)	E.I.R.P (mW)	Power Density at R = 20 cm (mW/cm^2)	Limit (mW/cm^2)	Result
2.4 GHz WLAN	24.23	1.77	26.000	398.107	0.079	1.000	PASS
Wi-Fi 5GHz U-NII 1	19.30	1.59	20.890	122.744	0.024	1.000	PASS
Wi-Fi 5GHz U-NII 2A	18.97	1.71	20.680	116.950	0.023	1.000	PASS
Wi-Fi 5GHz U-NII 2C	20.12	2.69	22.810	190.985	0.038	1.000	PASS
Wi-Fi 5GHz U-NII 3	18.87	2.16	21.030	126.765	0.025	1.000	PASS

Note: The conducted output power is refer to report No.: 2430454R-RFUSV01S-A and 2430454R-RFUSV03S-A from the DEKRA.

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