



## EMI TEST REPORT

FOR RIVERDI HB IPS 7.0" MIPI LCD SERIES

Rev.1.0  
2022-03-17

The EMI test report applies to below Riverdi HB, IPS 7.0" MIPI series:

PRODUCT NAME	DESCRIPTION
RVT70HSMNWC00	HB, IPS, 7.0", 800 cd/m <sup>2</sup> , MIPI, uxTouch, Air bonding
RVT70HSMNWC00-B	HB, IPS, 7.0", 850 cd/m <sup>2</sup> , MIPI, uxTouch, Optical bonding
RVT70HSMNWCA0	HB, IPS, 7.0", 800 cd/m <sup>2</sup> , MIPI, aTouch, Air bonding
RVT70HSMFWCA0	HB, IPS, 7.0", 800 cd/m <sup>2</sup> , MIPI, aTouch, Air bonding, Metal Frame



## 1. REVISION RECORD

REV NO.	REV DATE	CONTENTS	REMARKS
1.0	2022-03-17	Initial version	



**2. CONTENTS**

- 1. REVISION RECORD..... 2
- 2. CONTENTS..... 3
- 3. SUMMARY OF TEST RESULT ..... 4
- 4. GENERAL INFORMATION..... 4
  - 4.1 Description of EUT..... 4
  - 4.2 Description of EUT peripheral..... 4
  - 4.3 Measuring device and test settings..... 4
- 5. TEST RESULTS ..... 5
  - 5.1 Test results..... 5
- 6. Photos..... 7
- 7. Summary..... 8



## 3. SUMMARY OF TEST RESULT

TEST ITEM	NORM APPLIED	Result
RADIATED EMISSION 30-1000 MHz	EN 55032 (CISPR32). Radiated emission 30-1000 MHz (EMI)	Pass

Date of Test: 11/13/2022

Certificated EMC Lab: RADMOR S.A., Gdynia.

Scope of accreditation for the testing lab: **No AB 1132**

More info about the lab from the below link:

<https://www.radmor.com.pl/services/lab>



AB 1132

## 4. GENERAL INFORMATION

### 4.1 Description of EUT

<b>PRODUCT NAME</b>	RVT70HSMNWCA0
<b>TEST VOLTAGE</b>	Battery 12V

**Note.** All test was performed on RVT70HSMNWCA0. But results applied for every module within this line: RVT70HSMNWC00-B, RVT70HSMNWC00, RVT70HSMFWCA0

### 4.2 Description of EUT peripheral

The 70STM32H7 designed by Riverdi was used to drive RVT70HSMNWCA0 during the EMI test.

70STM32H7, as the main board of Riverdi STM32 Embedded 7.0" display applies high-performance MCU STM32H747XIH6 on the board.

70STM32H7 integrates with communication interfaces like RS232, RS485, 2xCAN FD, USB, haptic feedback interface, SWD interface, and RiBUS. It also features a low EMI design.

The RVT70HSMNWCA0 itself was configured to optimal setting. Static pictures were presented on the screen during the EMI test.

### 4.3 Measuring device and test settings

EQUIPMENT	MODEL	VERSION
EMI test receiver	Rohde & Schwarz ESW-44	1.72 SP1

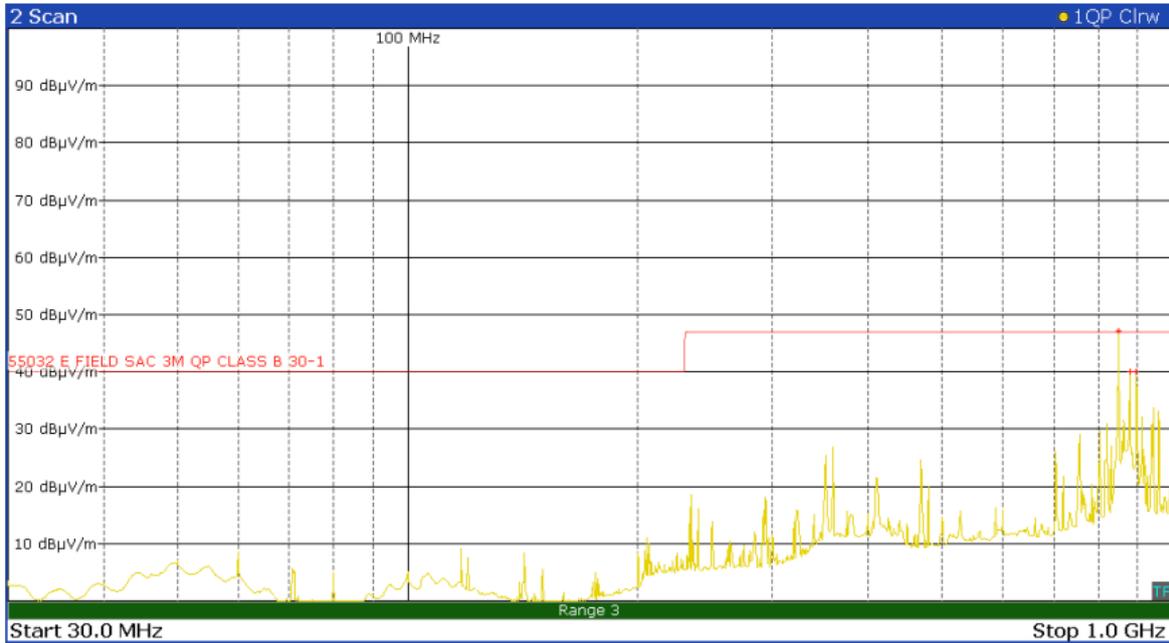
Meas BW: 120 kHz	Filter Type: Quasipeak	Meas Time: 1 s	Center Freq: 1 GHz
Attenuation: 0 dB	Auto Range: On	Auto Preamp: On	Preamp: On
Preselector: On	Filter Split: Off	Notch Filter 1: Off	Notch Filter 2: Off
Input: 1 DC			



## 5. TEST RESULTS

### 5.1 Test results

Horizontal:



Trace 1:

CLR/WRITE

QUASI PEAK

Meas Time: 1 s

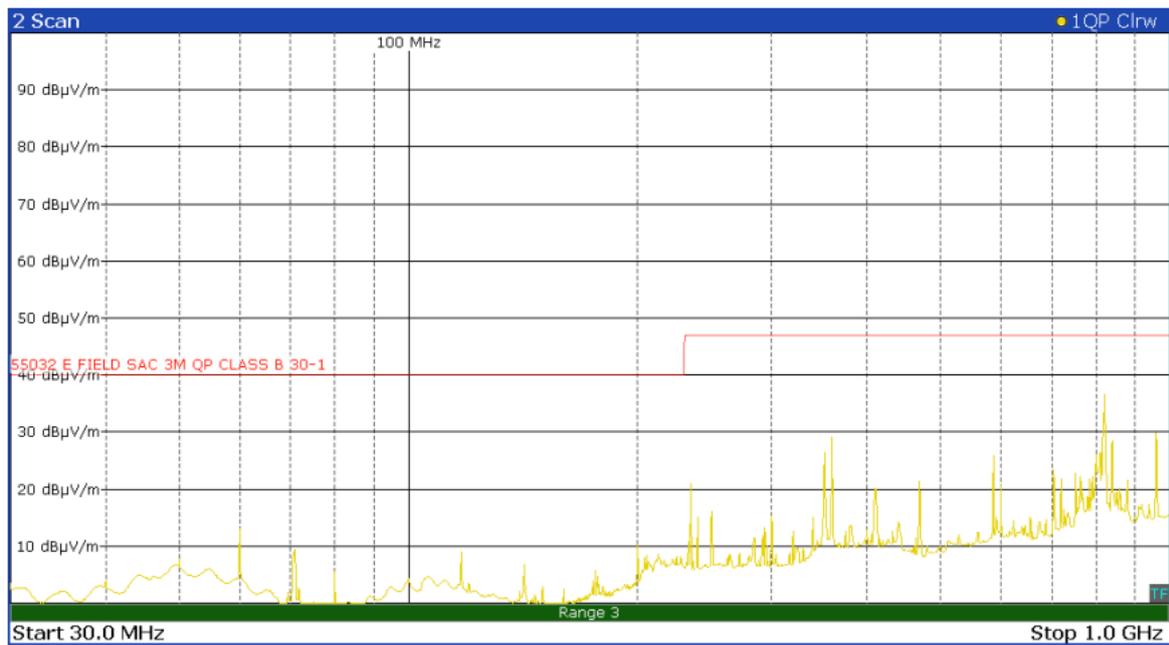
Margin: 10 dB

Peak Values: 3

Trace	Frequency	Level	Delta Limit	LISN Phase	Comment
1	850.6 MHz	47.2 dBµV/m	0.2 dBµV/m		
1	880 MHz	40.14 dBµV/m	-6.86 dBµV/m		
1	897.8 MHz	40.09 dBµV/m	-6.91 dBµV/m		



## Vertical:



## 6. Photos

*Figure 1. Radiation Emission 30-1000MHz Test Front View*





## 7. Summary

The test results confirmed the low electromagnetic emissions of Riverdi HB, IPS 7.0" MIPI displays.

Riverdi HB, IPS 7.0" MIPI displays have undergone EMI compliance self-tests and performed well at specified EMI limits.

In consequence, Riverdi HB, IPS 7.0" MIPI displays will not impact the environment due to the very low emission levels measured.

Hi, I am here to help you!  
If you have any additional  
questions, please contact  
our support via email:  
[contact@riverdi.com](mailto:contact@riverdi.com)

