

EPD-660_662

2021Q4 release Test Report

Initiated by	Luke Chang	Approved by	Shane GH
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Revision History :

Date	Revision	Description	Creator
2022/04/25	V1.0	First release of 2021Q4 release function test	Luke Chang

Test Results Definition :

Criteria	Definition
PASS	Test result pass and function work perfectly.
Fail	Test fail or can not meet the spec requirement.
Limitation	There are no plans to fix this erratum.
N/A	Spec not support or driver not ready.
Check Next Version	HW modified circuit and solution 3erified, and check the function result has pass. Need to check next version.

Test Results Summary :

Num.	Test Item	Result	Remark
1.	ePaper Manager Function		
1.01	Browser Compatibility	PASS	
1.02	ePaper Manager function test	PASS	
2.	WISE-3220		
2.01	Firmware upgrade	PASS	
2.02	Config WISE-3220	PASS	
3.	EPD Tags		
3.01	EPD-660/662	PASS	
4.	Stability		
4.01	Stability stress Test	PASS	

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System Configuration :

Item.	Version	File Name	Description.
OS	Ubuntu 18.04	EPDWT_ARK1123HA2_U1804_1703	32OSARKE000106
ePaper Manager	1703	Image build-in	
EPD Portal	1.9.2	ePaper Manager build-in	
EPD Hub	1.4.6	ePaper Manager build-in	
WISE-3220	3220S00OIV0104	3220S00OIV0104.bin	2080009438
EPD-660	E132RS00XMV2015	E132RS00XMV2015.bin	2080010132
EPD-662	E132RS00XMV2015	E132RS00XMV2015.bin	2080010132

<input type="checkbox"/>	Name	Panel Type	Processing	Software	Package	Program	FW Version
<input type="checkbox"/>	EPD_Hub	-	↓ 0 ↺ 0	0/0	0	N/A	EPD_HubS00UDV1406
<input type="checkbox"/>	EPD-Tag-02dbbe	EPD-132R	↓ 0 ↺ 0	0/0	0	N/A	E132RS00XMV2015
<input type="checkbox"/>	EPD-Tag-02dbda	EPD-132B	↓ 0 ↺ 0	0/0	0	N/A	E132RS00XMV2015
<input type="checkbox"/>	EPD-Tag-02ee0e	EPD-132R	↓ 0 ↺ 0	0/0	0	N/A	E132RS00XMV2015

Test Equipment :

Item.	Description.
<p>ARK-1123H A2</p>	
<p>WISE-3220</p>	
<p>EPD-660/662</p>	

1. ePaper Manager Function

1.01 Browser Compatibility

1.01.01.01 Test Purpose :

To ensure ePaper Manager is compatibility with popular browser.

1.01.01.02 Test Tool or Equipment:

1. ARK-1123H A2 as ePaper Manager server
2. WISE-3220 as EPD Router
3. EPD-660/662 as EPD device

1.01.01.03 Testing Configuration:

1. Test environment: Room temperature

1.01.01.04 Test Procedure:

1. Insert battery to power up device.
2. Press the button and check the responding function.

1.01.01.05 Test Result:

Item	Sub Item	Criteria	Result	Remark
Chrome	Login	Functions work properly as designed	PASS	
	Change Password		PASS	
	Overview chart		PASS	
	EPD controlling Preview and Transmit		PASS	
	Template design		PASS	
Firefox	Login	Functions work properly as designed	PASS	
	Change Password		PASS	
	Overview chart		PASS	
	EPD controlling Preview and Transmit		PASS	
	Template design		PASS	

1.02 ePaper Manager function test

1.02.01 General Function

1.02.01.01 Test Purpose :

This test ensures that the general functions provided in EPD are working as designed.

1.02.01.02 Test Tool or Equipment:

1. ARK-1123 A2 as ePaper Manager server
2. WISE-3220 as EPD Router
3. EPD-660/662 as EPD device

1.02.01.03 Testing Configuration:

1. Test environment: Room temperature

1.02.01.04 Test Procedure:

1. Test all the available web GUI functions.

1.02.01.05 Test Result:

Item	Sub Item	Funcitons	Result	Remark
Language Switch	English/繁體/简体	All UI pages can switch languages normally	PASS	
Service Monitoring	Portal/Hub Service Monitoring	EPD Portal/Hub service monitoring can work normally	PASS	
Event Notifications	Devices Event Pop Up Information	Device events can be popped up immediately	PASS	
User Profile	User/Role	<ol style="list-style-type: none"> 1. User/Rrole information 2. Change Password/Sign Out function 	PASS	

1.02.02 Overview Page**1.02.02.01 Test Purpose :**

This test ensures that the functions provided in EPD server Web interfaces are working as designed.

1.02.02.02 Test Tool or Equipment:

1. ARK-1123H A2 as ePaper Manager server
2. WISE-3220 as EPD Router
3. EPD-6600/662 as EPD device

1.02.02.03 Testing Configuration:

1. Test environment: Room temperature

1.02.02.04 Test Procedure:

1. Test all the available web GUI functions.

1.02.02.05 Test Result:

Item	Sub Item	Funcitons	Result	Remark
Overview	Device Overview	Web shows the tag status, and the charts and links are correct.	PASS	
	Effective Scheduled Task	List coming schedules for device and group Can enable / disable / delete schedule	PASS	

1.02.03 EPD Controller**1.02.03.01 Test Purpose :**

This test ensures that the functions provided in EPD server Web interfaces are working as designed.

1.02.03.02 Test Tool or Equipment:

1. ARK-1123H A2 as ePaper Manager server
2. WISE-3220 as EPD Router
3. EPD-660/662 as EPD device

1.02.03.03 Testing Configuration:

1. Test environment: Room temperature

1.02.03.04 Test Procedure:

1. Test all the available web GUI functions in the EPD Controller category.

1.02.03.05 Test Result:

Item	Sub Item	Funcitons	Result	Remark
EPD Controller	Account	Change account and check privilege	PASS	
	Group	Switch and search Device group	PASS	
		Default Group (Devices QTY check) System-Server Configuration Configuration 1: Default Group Auto-Join(ON) Default Group Auto-Leave(OFF) *One Server with single router Configuration 2: Default Group Auto-Join(ON)	PASS	

	Default Group Auto-Leave(ON) *One Server with single router		
	Roaming Function	PASS	
Status	Filter the device status	PASS	
Mode	Switch to Group mode, and can list / edit group schedules.	PASS	
Search	Search for device by keyword	PASS	
Columns	Display selected columns	PASS	
Bind / Unbind Item	Single/ Batch Bind Item, Select and Preview Template Batch template file format: JSON, CVS,XLSX	PASS	
Preview	Preview template	PASS	
Refresh	Single/Batch Send refresh command to EPD device	PASS	
Transmit	Transmit template to EPD device	PASS	
Carousel	Carousel Mode Transmit template	PASS	
Cancel	Cancel EPD Tag Jobs	PASS	
Monitors	Monitor Tag RSSI/Battery/Voltage information	PASS	
Info	Auto Retry Jobs maintenance	PASS	
Clear	Clear Tag information page	PASS	
Reset Tags	Reset tag status	PASS	
Deploy	Re-deployment to different Server and WiFi AP	PASS	
Schedule	Add, Edit , delete schedule	PASS	

1.02.04 Item Data

1.02.04.01 Test Purpose :

This test ensures that the functions provided in EPD server Web interfaces are working as designed.

1.02.04.02 Test Tool or Equipment:

1. ARK-1123H A2 as ePaper Manager server
2. WISE-3220 as EPD Router
3. EPD-660/662 as EPD device

1.02.04.03 Testing Configuration:

1. Test environment: Room temperature

1.02.04.04 Test Procedure:

1. Test all the available web GUI functions in the Item Data Category.

1.02.04.05 Test Result:

Item	Sub Item	Funcitons	Result	Remark
Item Data	Group	Can add, delete group	PASS	
	Upload new items	Can import item data from json, xls, xlsx, csv file	PASS	
	Add Items to current items	Can append items from json, xls, xlsx, csv file	PASS	
	Search	Can search keywords in content	PASS	
	Columns	Can show selected columns	PASS	
	Help	Show help hint	PASS	
	Fields sorting function	Data sorting by fields	PASS	
	Pages control	Show rows in 1page Go to x page	PASS	

1.02.05 Device List**1.02.05.01 Test Purpose :**

This test ensures that the functions provided in EPD server Web interfaces are working as designed.

1.02.05.02 Test Tool or Equipment:

1. ARK-1123H A2 as ePaper Manager server
2. WISE-3220 as EPD Router
3. EPD-660/662 as EPD device

1.02.05.03 Testing Configuration:

1. Test environment: Room temperature

1.02.05.04 Test Procedure:

1. Test all the available web GUI functions in the Device List category.

1.02.05.05 Test Result:

Item	Sub Item	Funcitons	Result	Remark
Device List	Account	Change account and check priledge	PASS	
	Group	Search Device group	PASS	

Status	Filter the device status	PASS	
Mode	Switch to Group mode, and can schedule group schedule.	PASS	
Add Device	Can add device from registerd list	PASS	
Edit mode	Enter Edit mode can delete device	PASS	
Delete	Enter Edit mode can delete device	PASS	
View detail Tag info	Shows the tag detail info	PASS	
View detail Router info	Shows the Router info (include IP)	PASS	
Router child Device info	Display the numbers of child devices for each routers and list child all devices information	PASS	

1.02.06 Template

1.02.06.01 Test Purpose :

This test ensures that the functions provided in EPD server Web interfaces are working as designed.

1.02.06.02 Test Tool or Equipment:

1. ARK-1123H A2 as ePaper Manager server
2. WISE-3220 as EPD Router
3. EPD-660/662 as EPD device

1.02.06.03 Testing Configuration:

1. Test environment: Room temperature

1.02.06.04 Test Procedure:

1. Test all the available web GUI functions in the Template category.

1.02.06.05 Test Result:

Item	Sub Item	Funcitons	Result	Remark
GUI functions	Add	1.Import from Json 2.Copy from current one 3.Create a new one 4. Template not save reminder	PASS	
	Import/Export All Template	Import/Export All Template (JSON)	PASS	
	Delete	Delete template	PASS	
	Save	Save template	PASS	

	Label	Item function check	PASS	
	Text	Item function check	PASS	
	Image	Supported image format Show condition	PASS	
	Shape	Item function check	PASS	
	Barcode	Value Barcode type Sample Show condition	PASS	
	QRcode	Value Sample Show Condition	PASS	
	Canvas property	Item function check	PASS	

1.02.07 OTA

1.02.07.01 Test Purpose :

This test ensures that the functions provided in EPD server Web interfaces are working as designed.

1.02.07.02 Test Tool or Equipment:

1. ARK-1123H A2 as ePaper Manager server
2. WISE-3220 as EPD Router
3. EPD-660/662 as EPD device

1.02.07.03 Testing Configuration:

1. Test environment: Room temperature

1.02.07.04 Test Procedure:

1. Test all the available web GUI functions in the OTA category.

1.02.07.05 Test Result:

Item	Sub Item	Funcitons	Result	Remark
OTA	Upgrade	Upgrade firmware through gateway	PASS	
	Package	Upload package to FTP site	PASS	
	Storage	FTP site setting	PASS	
	EPD-660/662 OTA	total 3 pcs firmware update over the air	PASS	

1.02.08 Setting**1.02.08.01 Test Purpose :**

This test ensures that the functions provided in EPD server Web interfaces are working as designed.

1.02.08.02 Test Tool or Equipment:

1. ARK-1123H A2 as ePaper Manager server
2. WISE-3220 as EPD Router
3. EPD-660/662 as EPD device

1.02.08.03 Testing Configuration:

1. Test environment: Room temperature

1.02.08.04 Test Procedure:

1. Test all the available web GUI functions.

1.02.08.05 Test Result:

Item	Sub Item	Funcitons	Result	Remark
Setting	Role	Can view role priviledge	PASS	
	Account	Can add admin, device admin account	PASS	
	Device Group	Add, Edit , Delete device group	PASS	
	System	<ol style="list-style-type: none"> 1. Can enable/disable Email Service , Active License, and Clear Data 2. Collect Server Logs from Service Monitoring (download Logs) 3. EPD Portal/Hub Status Check (Start/Stop Monitor) 	PASS	
	Event	Can view, search, and export event log	PASS	

2. WISE-3220

2.01 Firmware upgrade

2.01.01.01 Test Purpose :

To verify the firmware can be upgrade via web interface

2.01.01.02 Test Tool or Equipment:

1. ARK-1123H A2 as ePaper Manager server
2. WISE-3220 as EPD Router
3. EPD-660/662 as EPD device

2.01.01.03 Testing Configuration:

1. Test environment: Room temperature

2.01.01.04 Test Procedure:

1. Use “System” > “Backup/Flash Firmware” > “Generate archive” to create setting backup file
2. Use “System” > “Backup/Flash Firmware” > “Flash Image” to upgrade firmware
3. Reset to default
4. Restore settings archive settings

2.01.01.05 Test Result:

Item	Criteria	Result	Remark
Upgrade	Firmware can be upgraded, and settings are not changed (click “Keep Settings”). 1. Web login password 2. EPD Router setting(WISE-3220) 3. EPD Connection Setting(WISE-3220) Not click ”Keep Settings” all setting will reset to default.	PASS	
Reset to default	All setting are reset to default	PASS	
Backup / Restore	All setting can be restored from backup file.	PASS	
Reset	Restore the keyin data to the originally stored data	PASS	

2.02 Config WISE-3220

2.02.01.01 Test Purpose :

Verify the settings in ePaper Manager.

2.02.01.02 Test Tool or Equipment:

1. ARK-1123H A2 as ePaper Manager server
2. WISE-3220 as EPD Router
3. EPD-230/232 as EPD device

2.02.01.03 Testing Configuration:

1. Test environment: Room temperature

2.02.01.04 Test Procedure:

1. Check the hostname / port / Device Name in ePaper Manager.
2. Modify the settings.

2.02.01.05 Test Result:

Item	Criteria	Result	Remark
Configuration	Can config Host name / EPD Router Setting	PASS	
	After reset, the data is kepted without change	PASS	
	Reset to default, the setting is back to default	PASS	

3. EPD Tags

3.01 EPD-660/662

3.01.01.01 Test Purpose :

To verify the button function is working correctly.

3.01.01.02 Test Tool or Equipment:

1. ARK-1123H A2 as EPaper Manager server
2. WISE-3220 as EPD Gateway
3. EPD-660/662 EPD device

3.01.01.03 Testing Configuration:

1. Test environment: Room temperature

3.01.01.04 Test Procedure:

1. Check all button ([KeyR1]~ [KeyR5])function and LED behavior is correct.
2. Check UI tag status
3. Carouse function check

3.01.01.05 Test Result:

Item	Sub Item	Criteria	Result	Remark
Chasses button function	Wakeup/Reset	Button function properly	PASS	
	First page	Button function properly	PASS	
	Previous page	Button function properly	PASS	
	Next page	Button function properly	PASS	
	Last page	Button function properly	PASS	
Tag Fresh Time	Dual EPD-662 fresh at same time	Should less than 1 min	PASS	58"
Offline from ePaper Manager	Carousel mode	Carousel mode works properly in offline mode	PASS	
Battery Status Report	Charging battery	function properly	PASS	Charging : LED green. Finish Charge: LED off

	Discharging battery	function properly	PASS	
Power Status	With DC-in	DC-in mode function properly	PASS	
	Without DC-in	Power Saving mode function properly	PASS	
LED	Green LED	LED function properly	PASS	
	Red LED	LED function properly	PASS	
Transaction ID for unlock		Trasmit 20 jobs and tag works properly	PASS	
Panel Status Indicator	WIFI off line	WIFI off line	PASS	
	Low Battery	Battery Capacity <15%	PASS	
	Server offline	Server Disconnect	PASS	

4. Stability

4.01 Stability stress test

4.01.01.01 Test Purpose :

Confirm whether the function of tag refresh-image is normally.

4.01.01.02 Test Tool or Equipment:

1. ARK-1123H A2 as EPaper Manager server
2. WISE-3220 as EPD Router
3. EPD-660/662 EPD device

4.01.01.03 Testing Configuration:

1. Test environment: Room temperature

4.01.01.04 Test Procedure:

1. Connect tags to ePaper Manager
2. Group schedule to transmit templates to tag.

4.01.01.05 Test Result:

Item	Criteria	Result	Note
Tag Refresh-Image Stress Test	<ol style="list-style-type: none"> 1. Image transfer every hour. 2. Continuous image transmission for 10 days without any abnormal state 	PASS	