EPD-660_662 Component Change Test Report

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Revision History:

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Date	Revision	Description	Creator
2022/11/24	V1.0	iDesign Number : 2484-091 1211006898-01 2nd source CLI Tool v4106 2022 H2 EPD-660.662 FW V2019 validation DeviceOn/ePaper: V1905 WISE-3220:V0106	Luke Chang

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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	Check Next Version	
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	Check Next Version	
5	SW Utility		
5.01	CLI Tool	PASS	

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System Configuration:

Item.	Version	File Name	Description.
os	Ubunto 18.04	EPDWT_ARK1123HA2_U1804_1905	
ePaper Manager	1905	Image build-in	
EPD Portal	1.11.4	ePaper Manager build-in	
EPD Hub	2.1.2	ePaper Manager build-in	
WISE- 3220	3220S00OIV0106	3220S00OIV0106.bin	2080009438
EPD-660	E132RS00XMV2019	E132RS00XMV2019.bin	2080010496
EPD-662	E132RS00XMV2019	E132RS00XMV2019.bin	2080010496
CLI Tool	V4106	N/A	
Waveform	320_R279_AD8211_ED133UT2C1_TC	320_R279_AD8211_ED133UT2C1_TC.wbf	for CLI tool
FW	EPD-132R-XMX-0201-EVK-31691c5	EPD-132R-XMX-0201-EVK-31691c5.bin	for CLI tool

1							Search
	Name 💠	Panel Type ≑	Processing	Software	Package	Program	FW Version \$
	♣ EPD_Hub	-	↓ 0	0/0	0	N/A	EPD_HubS00UDV2102
	EPD-Router-4830b3	-	↓ 0 €0	0/0	0	N/A	V1.0.05
	EPD-Tag-02d8d4	EPD-660	↓ 0	0/0	0	N/A	E132RS00XMV2019
	EPD-Tag-02dbbe	EPD-662	↓ 0	0/0	0	N/A	E132RS00XMV2019
	EPD-Tag-02ec60	EPD-660	↓ 0	0/0	0	N/A	E132RS00XMV2019
					Total 436 5/page ∨	< 1 2 3 4	5 6 88 >

Test Equiptment:





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
	Login		PASS	
	Change Password		PASS	
Chrome	Overview chart	Functions work properly as designed	PASS	
	EPD controlling Preview and Transmit		PASS	
	Template design		PASS	
	Login		PASS	
	Change Password		PASS	
Firefox	Overview chart	Functions work properly as designed	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.

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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	 User/Rrole information 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
	Device Overview	Web shows the tag status, and the charts and links are correct.	PASS	
Overview	IEffective 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
	Account	Change account and check privilege	PASS	
		Switch and search Device group	PASS	
		Default Group (Devices QTY check)		
		System-Server Configuration		
EPD		Configuration 1:		
Controller	Group	Default Group Auto-Join(ON)	DAGG	
		Default Group Auto-Leave(OFF)	PASS	
		*One Server with single router		
		Configuration 2:		
		Default Group Auto-Join(ON)		

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	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
	Single/ Batch Bind Item, Select and Preview	
Bind / Unbind Item	Template	PASS
	Batch template file format: JSON, CVS,XLSX	
Preview	Preview template	PASS
Refresh	Single/Batch Send refresh command to EPD	PASS
	device	11100
Transmit	Transmit template to EPD device	Check Next Version
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
	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	
Item Data	Search	Can search keywords in content	PASS	
item Data	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	D AGG	
	rages control	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	
Device List	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 (incluse 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 Json2.Copy from current one3.Create a new one4. Template not save reminder	PASS	
Import/Export All Temp Delete Save	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	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
	Upgrade	Upgrade firmware through gateway	PASS	
ОТА	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	

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Setting 1.02.08

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
	Role	Can view role priviledge	PASS	
	Account	Can add admin, device admin account	PASS	
	Device Group	Add, Edit , Delete device group	PASS	
Setting	System	 Can enable/disable Email Service , Active License, and Clear Data Collect Server Logs from Service Monitoring (download Logs) 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	Backup / Restore All setting can be restored from backup file.		
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		Remark
Configuration	Can config Host name / EPD Router Setting	PASS	
	After reset, the data is keeped without	DACC	
	change	PASS	
	Reset to default, the setting is back to	DACC	
	default	PASS	



3. EPD Tags

3.01 EPD-660/662

3.01.01.01 Test Purpose:

To verify the button function is working correctly.

3.01.01.02Test 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
	Wakeup/Reset	Button function properly	PASS	
	First page	Button function properly	PASS	
Chasses button function	Previous page	Button function properly	PASS	
runction	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	
				Charging:
				LED green.
Battery Status Report	Charging battery	function properly	PASS	Finish
				Charge:
				LED off



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	Discharging battery	function properly	PASS
	With DC-in	DC-in mode function properly	PASS
Power Status	Without DC-in	Power Saving mode function properly	PASS
1.50	Green LED	LED function properly	PASS
LED	Red LED	LED function properly	PASS
Transaction ID for unlock		Trasmit 20 jobs and tag works properly	PASS
	WIFI off line	WIFI off line	PASS
Panel Status Indicater	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	Image transfer every hour.	Check Next	
Test	2. Continuous image transmission for 10	Version	
	days without any abnormal state		



5. SW Utility

5.01 CLI Tool

4.01.01.06 Test Purpose:

To ensure CLI Tool works properly.

4.01.01.07 Test Tool or Equipment:

- 1. CLI Tool
- 2. ED-22
- 3. EPD-660 Control Board / Power Board

4.01.01.08 Testing Configuration:

1. Test environment: Room temperature

4.01.01.09 Test Procedure:

1. Follow CLI Tool SOP to flash FW

4.01.01.10 Test Result:

Item	Criteria	Result	Remark
CLI Tool	Functions work properly as designed	PASS	