



TagLINK Bridge Version Tests

Testing Report

Tested by : Eran Kaplinsky

Date of Test : 25/02/2025

Current Version : 4.3.98

New Version : 4.3.100

Note: : The tests were performed after Wiliot version approval

1 Objective:

Validate the performance of the TagLINK Bridge with Pixel tags under different configurations and firmware versions, ensuring consistent identification of tags over time.

2 Test Prerequisites:

2.1 Equipment:

- TagLINK Bridge device.
- 56 Wiliot tags.
- A computer with access to Wiliot Monitor.
- A power source with both voltage and current control.

3 Test Environment:

- Clear area with a 3-meter radius between the bridge and the tags.
- No other devices operating on similar frequencies to avoid interference.

4 Software & Firmware:

- Current firmware version installed on the bridge.
- Updated firmware version ready for installation.

5 Test 1 – Power Test

Mark in the table below “Done” for every task done, and “Pass”/”Fail” for the outcome

5.1 Step 1: Initial Setup

- Place the bridge at the marked location in the testing area.
- Arrange the Pixel tags within a 3-meter radius of the bridge.

Done



5.2 Step 2: Testing with Minimal Power Configuration

- In Wiliot system – set "Energy Sub 1G" to minimal value - 14
- Click the "Bridge Management" icon and choose the Bridge that is being tested
- Click "Survey" and set the duration to 10 minutes.
- Monitor and log the number of tags identified by the Wiliot Monitor.

Bridge version: 4.3.98

Done

Done

Done

Pass - 47tags

SurveyReport_ERM Telematics (Oren)_20250227_171201

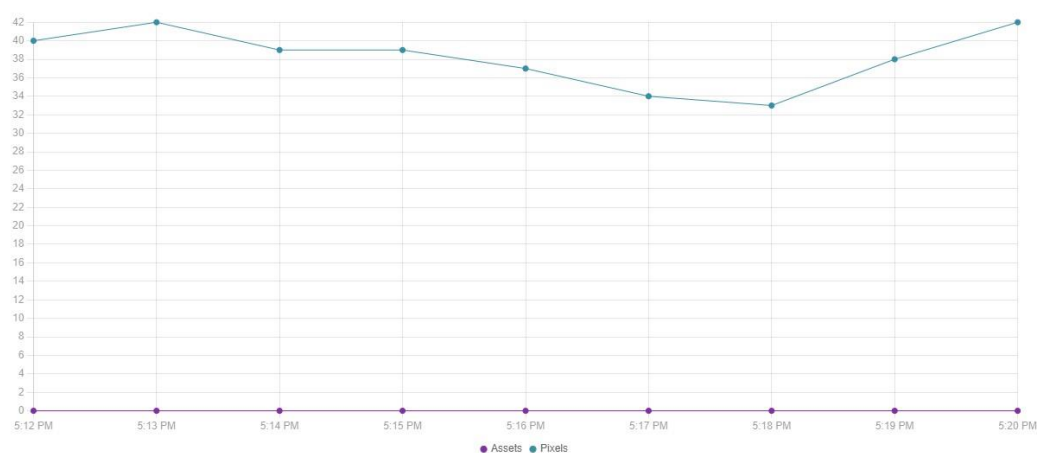
Started at: Feb 27, 2025, 5:12 PM | Finished at: Feb 27, 2025, 5:22 PM

Number of Assets/Pixels

47
Pixels detected

0
Assets detected

Assets/Pixels over time



Done

Pass

5.3 Step 3: Testing with Maximum Power Configuration

- In Wiliot system – set "Energy Sub 1G" to maximum value - 32
- Redo the previous process and log the

Bridge version 4.3.98

Done

Pass – 56 tags

results

SurveyReport_ERM Telematics (Oren)_20250227_175414

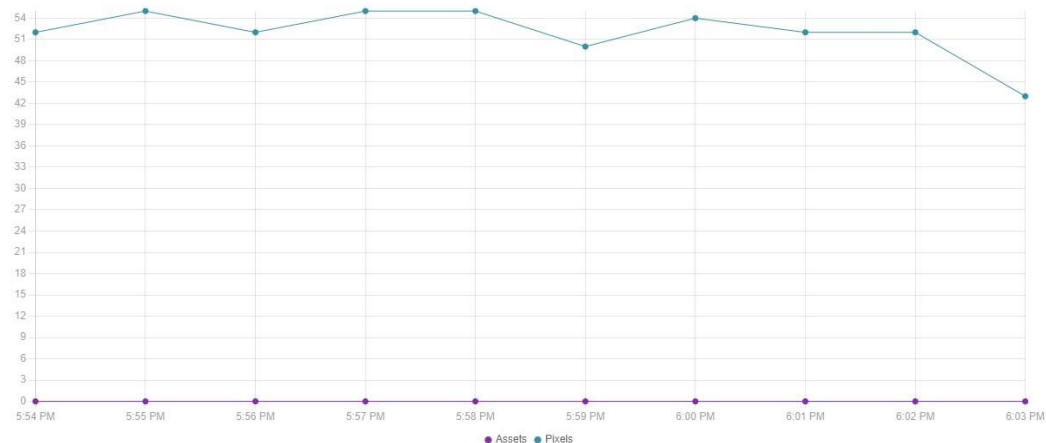
Started at: Feb 27, 2025, 5:54 PM | Finished at: Feb 27, 2025, 6:04 PM

Number of Assets/Pixels

56
Pixels detected

0
Assets detected

Assets/Pixels over time



5.4 Step 4: Firmware Upgrade

- Upgrade the bridge to the new firmware version as provided.
- Verify the upgrade by checking the firmware version in the Wiliot Monitor or bridge settings.

Update Version 4.3.100

Pass

Done

5.5 Step 5: Repeat the tests with the New Firmware

- Repeat the tests outlined in Steps 2 and 3 for the upgraded firmware:

Version 4.3.100

4.3.100

Repeating tests:

Step 2: Testing with Minimal Power Configuration

- In Wiliot system – set "Energy Sub 1G" to minimal value - 14

Bridge Version 4.3.100

Done

- Click the "Bridge Management" icon and choose the Bridge that is being tested
- Click "Survey" and set the duration to 10 minutes.
- Monitor and log the number of tags identified by the Wiliot Monitor.

Done

Done

Pass – 43 tags

SurveyReport_ERM Telematics (Oren)_20250227_130739

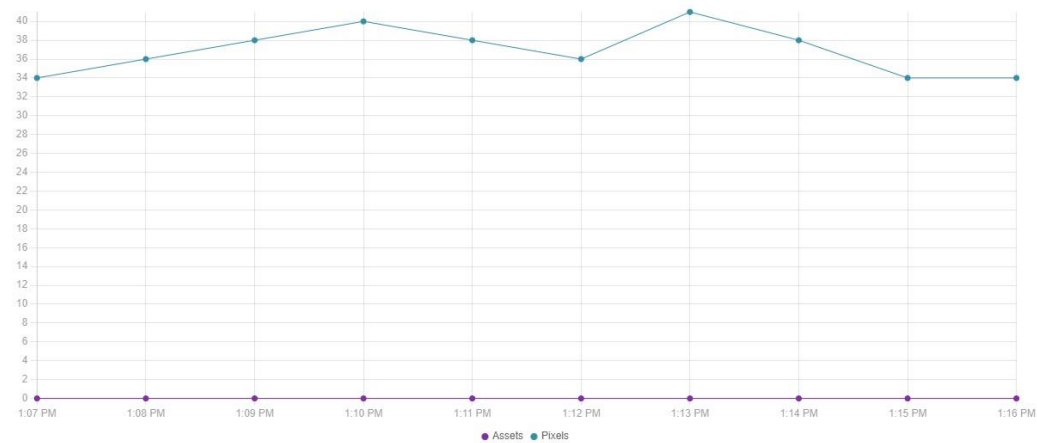
Started at: Feb 27, 2025, 1:07 PM | Finished at: Feb 27, 2025, 1:17 PM

Number of Assets/Pixels

43
Pixels detected

0
Assets detected

Assets/Pixels over time



Done

- Save the results (log file) with appropriate labels.

Step 3: Testing with Maximum Power Configuration

- In Wiliot system – set "Energy Sub 1G" to maximum value - 32

Pass – 56 tags

SurveyReport_ERM Telematics (Oren)_20250227_123254

Started at: Feb 27, 2025, 12:32 PM | Finished at: Feb 27, 2025, 12:42 PM

Number of Assets/Pixels

56

Pixels detected

0

Assets detected

Assets/Pixels over time

Time	Assets	Pixels
12:32 PM	0	42
12:33 PM	0	54
12:34 PM	0	55
12:35 PM	0	55
12:36 PM	0	54
12:37 PM	0	54
12:38 PM	0	54
12:39 PM	0	54
12:40 PM	0	54
12:41 PM	0	54
12:42 PM	0	53

- Redo the previous process and log the results

Done

6 Test 2 – Low Voltage and Current Test

- Connect to Bridge to a 12V 1Amp power source - Lower the voltage power to 6v - Drop the current to 50mAmp for 30 seconds - Raise the power back to 1Amp - Run Test 1 steps 1 to 3	Done
	Done
	Pass
	Done
	The results should be the same or better than the previous run
Repeated Test 1:	
Step 1: Initial Setup	
Place the bridge at the marked location in the testing area.	Done

- Arrange the Pixel tags within a 3-meter radius of the bridge.



Step 2: Testing with Minimal Power Configuration

- In Wiliot system – set "Energy Sub 1G" to minimal value - 14
- Click the "Bridge Management" icon and choose the Bridge that is being tested
- Click "Survey" and set the duration to 10 minutes.
- Monitor and log the number of tags identified by the Wiliot Monitor.

Done

Done

Done

SurveyReport_ERM Telematics (Oren)_20250227_113444

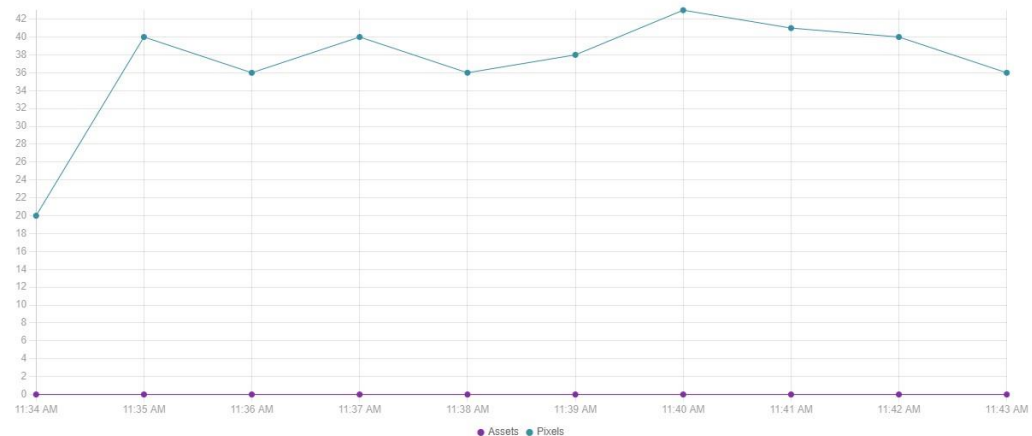
Started at: Feb 27, 2025, 11:34 AM | Finished at: Feb 27, 2025, 11:44 AM

Number of Assets/Pixels

45
Pixels detected

0
Assets detected

Assets/Pixels over time



- Logging for 10 min.
- Save the results (log

Done 45 pixels

Data log → <https://files.erm.co.il/s/fQIG29f4wDhUs2>

file) with appropriate labels.

Step 3: Testing with Maximum Power Configuration

- In Wiliot system – set "Energy Sub 1G" to maximum value - 32
- Redo the previous process and log the results

SurveyReport_ERM Telematics (Oren)_20250227_111552

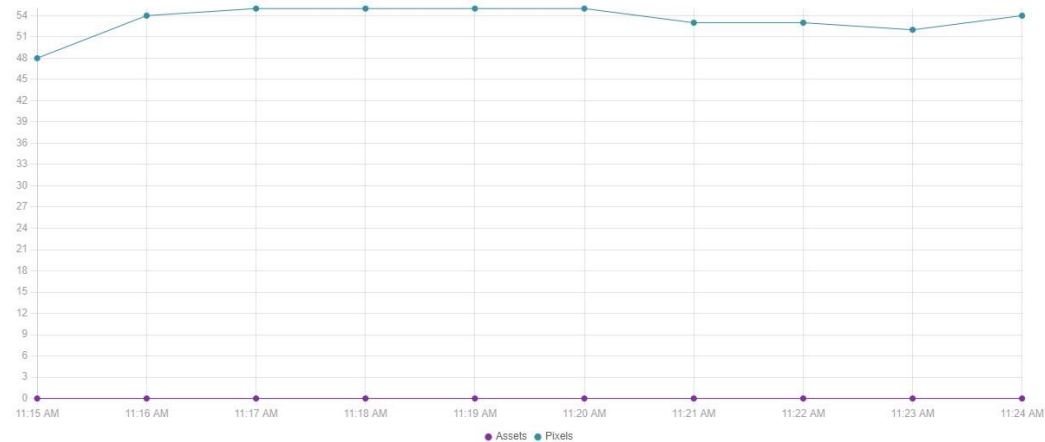
Started at: Feb 27, 2025, 11:15 AM | Finished at: Feb 27, 2025, 11:25 AM

Number of Assets/Pixels

56
Pixels detected

0
Assets detected

Assets/Pixels over time



Data log → <https://files.erm.co.il/s/tnV07k69kZ9O7zl>
56 pixels

7 Data Logging and Analysis

- For each test run:
 - Log the number of tags identified every second.
 - Record any deviations in detection.
 - Note any instances where tags were lost or misidentified.
- Compare results between:
 - Minimal and maximum power configurations.
 - Current firmware and upgraded firmware.
 - Generate a summary report of the findings, highlighting any differences in performance.

8 Expected Outcome

- Consistent identification of all Pixel tags under both power configurations, firmware versions and current changes.

- Enhanced or equivalent performance with the upgraded firmware.

9 New Version tests conclusion

Product passed