# RF EXPOSURE EVALUATION REPORT

| | | |
|---|---|---|
| **FCC ID** | : | **W22-ETAG75** |
| **Equipment** | : | **Electronic Shelf Label E-paper 7.5" Display** |
| **Brand Name** | : | **Store Intelligence Inc.** |
| **Model Name** | : | **ETAG 750E5** |
| **Marketing Name** | : | **ETAG 750E5 NFC LED BW (BWR)** |
| **Applicant** | : | **Store Intelligence**<br>**6700 Koll Center Parkway, Suite 109, Pleasanton, CA, 94566, USA** |
| **Manufacturer** | : | **Team Precision Public Company Limited**<br>**198 Moo 13 Suwansorn Rd. , Dong-Khee-Lek, Muang Prachinburi 25000, Thailand** |
| **Standard** | : | **47 CFR Part 2.1091** |

**We, SPORTON INTERNATIONAL INC has been evaluated this product in accordance with 47 CFR Part2.1091 and it complies with applicable limit.**

**Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 1190) and the FCC designation No. TW1190 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC evaluation.**

**The results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. Laboratory, the test report shall not be reproduced except in full**

Cona Huang

**Approved by: Cona Huang / Deputy Manager**

***SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory***

*No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)*

# Table of Contents

# History of this test report

| Report No. | Version | Description | Issued Date |
|---|---|---|---|
| FA211110006 | Rev. 01 | Initial issue of report | Mar. 18, 2022 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

# 1. Description of Equipment Under Test (EUT)

| Product Feature & Specification | |
|---|---|
| EUT Type | Electronic Shelf Label E-paper 7.5" Display |
| Brand Name | Store Intelligence Inc. |
| Model Name | ETAG 750E5 |
| Marketing Name | ETAG 750E5 NFC LED BW (BWR) |
| FCC ID | W22-ETAG75 |
| Wireless Technology and Frequency Range | 2.4GHz Proprietary: 2403 MHz ~ 2469 MHz |
| EUT Stage | Identical Prototype |

**Remark:** The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

**Reviewed by: Jason Wang**

**Report Producer: Daisy Peng**

# 2. Maximum RF average output power among production units

| Mode | Average power (dBm) |
|---|---|
| 2.4GHz Proprietary | 9 |

# 3. RF Exposure Limit Introduction

According to ANSI/IEEE C95.1-1992, the criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §1.1310.

| Frequency range (MHz) | Electric field strength (V/m) | Magnetic field strength (A/m) | Power density ($mW/cm^2$) | Averaging time (minutes) |
|---|---|---|---|---|
| (A) Limits for Occupational/Controlled Exposures | | | | |
| 0.3-3.0 | 614 | 1.63 | *(100) | 6 |
| 3.0-30 | 1842/f | 4.89/f | *(900/f2) | 6 |
| 30-300 | 61.4 | 0.163 | 1.0 | 6 |
| 300-1500 | | | f/300 | 6 |
| 1500-100,000 | | | 5 | 6 |
| (B) Limits for General Population/Uncontrolled Exposure | | | | |
| 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 |

The MPE was calculated at 20 cm to show compliance with the power density limit.

The following formula was used to calculate the Power Density:

$$S = \frac{PG}{4\pi R^2}$$

Where:
S = Power Density
P = Output Power at Antenna Terminals
G = Gain of Transmit Antenna (linear gain)
R = Distance from Transmitting Antenna

# 4. Radio Frequency Radiation Exposure Evaluation

## 4.1. Standalone Power Density Calculation

| Band | Antenna Gain (dBi) | Maximum Power (dBm) | Maximum EIRP (dBm) | Maximum EIRP (W) | Average EIRP (mW) | Power Density at 20cm (mW/cm^2) | Limit (mW/cm^2) |
|---|---|---|---|---|---|---|---|
| 2.4GHz Proprietary | 0.0 | 9.0 | 9.0 | 0.01 | 7.94 | 0.002 | 1.000 |

## Conclusion:

According to 47 CFR §1.1307, the RF exposure analysis concludes that the RF Exposure is FCC compliant.