

RF EXPOSURE EVALUATION REPORT

FCC ID : W22-ETAG42
Equipment : Electronic Shelf Label E-paper 4.2" Display
Brand Name : Store Intelligence Inc.
Model Name : ETAG 420E5
Marketing Name : ETAG 420E5 NFC LED BW (BWR)
Applicant : Store Intelligence
6700 Koll Center Parkway, Suite 109, Pleasanton, CA, 94566, USA
Manufacturer : Team Precision Public Company Limited
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



Approved by: Cona Huang / Deputy Manager



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History of this test report

Report No.	Version	Description	Issued Date
FA211110004	Rev. 01	Initial issue of report	Mar. 18, 2022
FA211110004	Rev. 02	Update Model Name	Apr. 01, 2022

**1. Description of Equipment Under Test (EUT)**

Product Feature & Specification	
EUT Type	Electronic Shelf Label E-paper 4.2" Display
Brand Name	Store Intelligence Inc.
Model Name	ETAG 420E5
Marketing Name	ETAG 420E5 NFC LED BW (BWR)
FCC ID	W22-ETAG42
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/f ²)	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/f ²)	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.