

ISED Radio Evaluation Report

IC: 32876-C410V2

Report No. : BTL-ISED-2-2509C327A
Equipment : Battery-Powered Outdoor Security Camera
Model Name : Tapo C410
Brand Name : tp-link
Applicant : TP-Link Systems Inc.
Address : 10 Mauchly, Irvine, CA 92618

ISED Standard(s) : RSS-102, Issue 6, December 2023

Date of Receipt : 2026/1/14
Date of Evaluation : 2026/3/13
Issued Date : 2026/4/10

The above equipment has been tested and found in compliance with the requirement of the above standards by **BTL Inc.**

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REVISION HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-ISED-2-2408G145	R00	Original Report.	2024/11/1	Invalid
BTL-ISED-2-2408G145	R01	Removed the series model name.	2024/11/29	Valid
BTL-ISED-2-2509C327A	R00	PCB hardware changes and add battery alternatives.	2026/4/10	Valid

1. LIMITS – RF EXPOSURE EVALUATION

The following sections summarize the reference levels associated with NS, SAR and RF field strengths from 3 kHz to 300 GHz.

1.1 Electric and magnetic field strength levels (3 kHz to 10 MHz)

The electric and magnetic field strength reference levels for devices employed by the general public (uncontrolled environment) and controlled-use devices (controlled environment) are summarized in table 5 and table 6.

Table 5: Electric field strength reference levels

Frequency range (MHz)	Reference level basis	Reference level (E_{RL}) for uncontrolled environment (V_{RMS}/m)	Reference level (E_{RL}) for controlled environment (V_{RMS}/m)	Reference period
0.003-10	NS	83	170	Instantaneous
1.10-10	SAR	$87/f^{0.5}$	N/A	6 minutes
1.29-10	SAR	N/A	$193/f^{0.5}$	6 minutes

Note: f is frequency in MHz.

Table 6: Magnetic field strength reference levels

Frequency range (MHz)	Reference level basis	Reference level (H_{RL}) for uncontrolled environment (A_{RMS}/m)	Reference level (H_{RL}) for controlled environment (A_{RMS}/m)	Reference period
0.003-10	NS	90	180	Instantaneous
0.1-10	SAR	$0.73/f$	$1.6/f$	6 minutes

Note: f is frequency in MHz.

1.2 Electric field strength levels, magnetic field strength levels and power density levels (10 MHz to 300 GHz)

The electric and magnetic field strength reference levels, power density reference levels, and associated reference period for devices employed by the general public (uncontrolled environment) and controlled-use devices (controlled environment) are specified in table 7 and table 8. Note that the power density limits specified in these tables apply to whole body exposure conditions.

Table 7: RF field strength and power density limits for devices used by the general public (uncontrolled environment)

Frequency range (MHz)	Electric field (V _{RMS} /m)	Magnetic field (A _{RMS} /m)	Power density (W/m ²)	Reference period (minutes)
10-20	27.46	0.0728	2	6
20-48	$58.07 / f^{0.25}$	$0.1540 / f^{0.25}$	$8.944 / f^{0.5}$	6
48-300	22.06	0.05852	1.291	6
300-6000	$3.142 f^{0.2417}$	$0.008335 f^{0.2417}$	$0.02619 f^{0.6834}$	6
6000-15000	61.4	0.163	10	6
15000-150000	61.4	0.163	10	$616000 / f^{1.2}$
150000-300000	$0.158 f^{0.5}$	$4.21 \times 10^{-4} f^{0.5}$	$6.67 \times 10^{-5} f$	$616000 / f^{1.2}$

Note: f is frequency in MHz.

Table 8: RF field strength and power density limits for controlled-use devices (controlled environment)

Frequency range (MHz)	Electric field (V _{RMS} /m)	Magnetic field (A _{RMS} /m)	Power density (W/m ²)	Reference period (minutes)
10-20	61.4	0.163	10	6
20-48	$129.8 / f^{0.25}$	$0.3444 / f^{0.25}$	$44.72 / f^{0.5}$	6
48-100	49.33	0.1309	6.455	6
100-6000	$15.60 f^{0.25}$	$0.04138 f^{0.25}$	$0.6455 f^{0.5}$	6
6000-15000	137	0.364	50	6
15000-150000	137	0.364	50	$616000 / f^{1.2}$
150000-300000	$0.354 f^{0.5}$	$9.40 \times 10^{-4} f^{0.5}$	$3.33 \times 10^{-4} f$	$616000 / f^{1.2}$

Note: f is frequency in MHz.

2. EVALUATION FACILITY

The test locations stated below are under the ISED CAB identifier TW0659.

(ISED CN: 20088)

No. 68-1, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan

3. TABLE FOR FILED ANTENNA:

Ant.	Manufacturer	P/N	Type	Connector	Gain (dBi)
1	TP-Link Systems Inc.	3101507115	Dipole	N/A	0

Note: The above Antenna information are derived from the antenna data sheet provided by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

4. MAXIMUM RF OUTPUT POWER:

Mode	Maximum Output Power (dBm)
WLAN 2.4GHz	25.31

Note: The values are adopted from test report: BTL-ISED-1-2408G145.

5. CALCULATED RESULTS

Band	Minimum Operation Frequency (MHz)	Maximum Power (dBm)	Antenna Gain (dBi)	EIRP Power (dBm)	EIRP Power (W)	Distance (cm)	Power Density (W/m ²)	Limit of Power Density (W/m ²)	MPE Ratio	Result
WLAN 2.4G	2437.0	25.31	0.00	25.31	0.33963	20	0.6757	5.4040	0.1250	Pass

1. Minimum operation frequency is applied for severe limit.

2. MPE Ratio = Power Density / Limit of Power Density

End of Test Report