

Maximum Permissible Exposure Report

FCC ID: EROTSW770

Report No. : BTL-FCCP-5-1911T045
Equipment : 7 inch Touch Screen wall mount
Model Name : M201923002, TSW-770-B-S, TSW-770-W-S, TSW-770P-B-S,
TSW-770P-W-S, TSS-770-B-S, TSS-770-W-S
Brand Name : CRESTRON
Applicant : Crestron Electronics, Inc.
Address : 15 Volvo Drive, Rockleigh, NJ 07647
FCC Rule Part(s) : FCC Guidelines for Human Exposure IEEE C95.1
Date of Receipt : 2018/11/28
Date of Test : 2018/11/28 ~ 2019/12/18
Issued Date : 2020/3/24

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

Prepared by


Peter Chen, Engineer

**Approved by**


Scott Hsu, Manager

BTL Inc.

No.18, Ln. 171, Sec. 2, Jiuzong Rd., Neihu Dist., Taipei City 114, Taiwan

Tel: +886-2-2657-3299

Fax: +886-2-2657-3331

Web: www.newbtl.com

REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue.	2020/1/21
R01	Revised report to address TCB's comments.	2020/3/24

MPE CALCULATION METHOD:

Calculation Method of RF Safety Distance:

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

where:

S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

Table for Filed Antenna

For BT, BLE, WLAN:

Ant.	Brand	Test Model	Antenna Type	Connector	Gain (dBi)
1	YAGEO	TSW WLAN MAIN	PIFA	IPEX	-3.92

For 5G RLAN:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Note
1	YAGEO	TSW WLAN MAIN	PIFA	IPEX	2.23	UNII-1
					3.95	UNII-3

TEST RESULTS

For BT:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Peak Output Power (dBm)	Max. Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
-3.92	0.4055	5.74	3.7497	0.00030266	1	Complies

For BLE:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Peak Output Power (dBm)	Max. Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
-3.92	0.4055	1.63	1.4555	0.00011748	1	Complies

For 2.4G WLAN:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Peak Output Power (dBm)	Max. Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
-3.92	0.4055	20.03	100.6932	0.00812738	1	Complies

For 5G RLAN:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Peak Output Power (dBm)	Max. Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
3.95	2.4831	19.51	89.3305	0.04415200	1	Complies

Note:

1. The calculated distance is 20 cm.

COLLOCATED POWER DENSITY CALCULATIONS

So for BT, WIFI simultaneous transmission: $0.00030266/1+0.04415200/1=0.04445466<1$

End of Test Report