

# Maximum Permissible Exposure Report

## FCC ID: EROTSW1070

**Report No.** : BTL-FCCP-5-1911T046  
**Equipment** : 10.1 inch Touch Screen wall mount  
**Model Name** : M201923003, TSW-1070-B-S, TSW-1070-W-S, TSW-1070P-B-S,  
TSW-1070P-W-S, TSS-1070-B-S, TSS-1070-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** :

  
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**Approved by** :

  
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**BTL Inc.**

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**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:

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

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 <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
-3.92	0.4055	5.55	3.5892	0.00028970	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 <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
-3.92	0.4055	2.01	1.5885	0.00012822	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 <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
-3.92	0.4055	19.72	93.7562	0.00756746	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 <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
3.95	2.4831	19.16	82.4138	0.04073337	1	Complies

Note:

1. The calculated distance is 20 cm.

## COLLOCATED POWER DENSITY CALCULATIONS

So for BT, WIFI simultaneous transmission:  $0.0002897/1+0.04073337/1=0.04102307<1$

**End of Test Report**