

Testing Laboratory 0659



Maximum Permissible Exposure Report

FCC ID: EROTS770

Report No. : BTL-FCCP-5-2004T143

Equipment : 7 inch Touch Screen Surface mount **Model Name** : M201923005, TS-770-B-S, TS-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 : 2020/4/27

Date of Test : 2020/4/27 ~ 2020/5/11

Issued Date : 2020/5/27

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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Report No.: BTL-FCCP-5-2004T143

REPORT ISSUED HISTORY

| Report Version | Description | Issued Date |
|----------------|-----------------|-------------|
| R00 | Original Issue. | 2020/5/27 |

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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 | TS WLAN MAIN | PIFA | IPEX | -1.64 |

For 5G RLAN:

| Ant. | Brand | Model Name | Antenna Type | Connector | Gain (dBi) | Note |
|---------|-----------------|--------------------|--------------|-----------|------------|--------|
| 1 VACEO | TO MALANI MAINI | חורא | IDEV | 1.86 | UNII-1 | |
| ' | 1 YAGEO | YAGEO TS WLAN MAIN | PIFA | IPEX | 4.17 | UNII-3 |

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TEST RESULTS

For BT:

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm2) | Limit of Power Density (S) (mW/cm2) | Test Result |
|-----------------------|---------------------------|-------------------------------|-----------------------------|-------------------------------|---|-------------|
| -1.64 | 0.6855 | 6.63 | 4.6026 | 0.00062799 | 1 | Complies |

For BLE:

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm2) | Limit of Power Density (S) (mW/cm2) | Test Result |
|-----------------------|------------------------|-------------------------------|-----------------------------|-------------------------------|---|-------------|
| -1.64 | 0.6855 | 1.97 | 1.5740 | 0.00021476 | 1 | Complies |

For 2.4G WLAN:

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm2) | Limit of Power Density (S) (mW/cm2) | Test Result |
|-----------------------|---------------------------|-------------------------------|-----------------------------|-------------------------------|---|-------------|
| -1.64 | 0.6855 | 20.83 | 121.0598 | 0.01651773 | 1 | Complies |

For 5G RLAN:

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm2) | Limit of Power Density (S) (mW/cm2) | Test Result |
|-----------------------|---------------------------|-------------------------------|-----------------------------|-------------------------------|---|-------------|
| 4.17 | 2.6122 | 19.42 | 87.4984 | 0.04549361 | 1 | Complies |

Note:

1. The calculated distance is 20 cm.

COLLOCATED POWER DENSITY CACULATIONS

So for BT, WIFI simultaneous transmission: 0.00062799/1+0.04549361/1=0.0461216<1

End of Test Report

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