

FCC SAR TEST REPORT

FCC ID : HD5-CT30PL0N
Equipment : Mobile computer
Brand Name : Honeywell
Model Name : CT30PL0N
Applicant : Honeywell International Inc.
9680 Old Bailes Road, Fort Mill, SC 29707 USA
Manufacturer : Honeywell International Inc.
9680 Old Bailes Road, Fort Mill, SC 29707 USA
Standard : FCC 47 CFR Part 2 (2.1093)

We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample provide by manufacturer and the test data has been evaluated in accordance with the test procedures given in 47 CFR Part 2.1093 and FCC KDB and has been pass the FCC requirement.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications 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 |
|-------------|---------|-------------------------|---------------|
| FA1N0506-04 | 01 | Initial issue of report | Jan. 15, 2022 |
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1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for Honeywell International Inc., Mobile computer, CT30PL0N, are as follows.

| Equipment Class | Frequency Band | | Highest SAR Summary | | |
|-----------------|----------------|-------------|--------------------------|--------------------------------|-------------------------------|
| | | | Head (Separation 0mm) | Body-worn (Separation 15mm) | Extremity (Separation 0mm) |
| | | | 1g SAR (W/kg) | | 10g SAR (W/kg) |
| DTS | WLAN | 2.4GHz WLAN | 0.69 | 0.18 | 0.60 |
| NII | | 5GHz WLAN | 0.79 | 1.07 | 1.44 |
| DSS | 2.4GHz Band | Bluetooth | 0.11 | 0.03 | 0.14 |

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 test. This device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6 W/kg for Partial-Body 1g SAR, 4.0 W/kg for Product Specific 10g SAR) specified in FCC 47 CFR part 2 (2.1093) and ANSI/IEEE C95.1-1992, and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2013 and FCC KDB publications.

Reviewed by: Jason Wang
Report Producer: Daisy Peng

2. Guidance Applied

The Specific Absorption Rate (SAR) testing specification, method, and procedure for this device is in accordance with the following standards, the below KDB standard may not including in the TAF code without accreditation.

- FCC 47 CFR Part 2 (2.1093)
- ANSI/IEEE C95.1-1992
- IEEE 1528-2013
- FCC KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04
- FCC KDB 865664 D02 SAR Reporting v01r02
- FCC KDB 447498 D01 General RF Exposure Guidance v06
- FCC KDB 648474 D04 SAR Evaluation Considerations for Wireless Handsets v01r03
- FCC KDB 248227 D01 802.11 Wi-Fi SAR v02r02
- FCC KDB 941225 D07 UMPC Mini Tablet v01r02



3. Equipment Under Test (EUT) Information

3.1 General Information

| Product Feature & Specification | |
|--|---|
| Equipment Name | Mobile computer |
| Brand Name | Honeywell |
| Model Name | CT30PL0N |
| FCC ID | HD5-CT30PL0N |
| Wireless Technology and Frequency Range | WLAN 2.4 GHz Band: 2400 MHz ~ 2483.5 MHz WLAN 5.2 GHz Band: 5150 MHz ~ 5250 MHz WLAN 5.3 GHz Band: 5250 MHz ~ 5350 MHz WLAN 5.6 GHz Band: 5470 MHz ~ 5725 MHz WLAN 5.8 GHz Band: 5725 MHz ~ 5850 MHz Bluetooth: 2400 MHz ~ 2483.5 MHz NFC : 13.56 MHz |
| Mode | WLAN: 802.11a/b/g/n/ac HT20/HT40/VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE NFC: ASK, type A/B/F/V |
| HW Version | v1.0 |
| SW Version | 311.C0.00.0630-N-DEBUG |
| EUT Stage | Identical Prototype |
| Remark: | |
| 1. Based on original filing FCC ID: HD5-CT30PL0N, Sporton Report no.: FA1N0506 to update 2.4GHz WLAN output power and does not affect RF Exposure results, due to update output power was not higher than original report. | |

| For Sale Together | | | | |
|-----------------------|--------------|--------------------|------------|---------------------|
| Battery 1 | Brand Name | Honeywell | Model Name | CT30P-BTSC |
| | Power Rating | 3.87 Vdc, 3400 mAh | Type | Li-ion Battery Pack |
| Hand Strap | Brand Name | Honeywell | Model Name | CT30XP Hand strap |
| For Not Sale Together | | | | |
| Holster1 | Brand Name | Honeywell | Model Name | CT60 Holster |
| Holster2 | Brand Name | Honeywell | Model Name | CT60 Pouch |

4. RF Exposure Limits

4.1 Uncontrolled Environment

Uncontrolled Environments are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure. The general population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

4.2 Controlled Environment

Controlled Environments are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation). In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. The exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Limits for Occupational/Controlled Exposure (W/kg)

| Whole-Body | Partial-Body | Hands, Wrists, Feet and Ankles |
|------------|--------------|--------------------------------|
| 0.4 | 8.0 | 20.0 |

Limits for General Population/Uncontrolled Exposure (W/kg)

| Whole-Body | Partial-Body | Hands, Wrists, Feet and Ankles |
|------------|--------------|--------------------------------|
| 0.08 | 1.6 | 4.0 |

1. Whole-Body SAR is averaged over the entire body, partial-body SAR is averaged over any 1gram of tissue defined as a tissue volume in the shape of a cube. SAR for hands, wrists, feet and ankles is averaged over any 10 grams of tissue defined as a tissue volume in the shape of a cube.

5. WiFi Output Power (Unit: dBm)

<2.4GHz WLAN>

| 2.4GHz WLAN | | | | Ant 2 | | |
|-------------|---------------------|---------|-----------------|---------------------|---------------|--------------|
| | Mode | Channel | Frequency (MHz) | Average power (dBm) | Tune-Up Limit | Duty Cycle % |
| 2.4GHz WLAN | 802.11b 1Mbps | 1 | 2412 | 17.30 | 17.50 | 99.20 |
| | | 6 | 2437 | 17.90 | 18.00 | |
| | | 11 | 2462 | 17.50 | 17.50 | |
| | 802.11g 6Mbps | 1 | 2412 | 15.70 | 16.00 | 98.30 |
| | | 6 | 2437 | 18.10 | 18.50 | |
| | | 11 | 2462 | 17.10 | 17.50 | |
| | 802.11n-HT20 MCS0 | 1 | 2412 | 15.20 | 15.50 | 98.30 |
| | | 6 | 2437 | 18.40 | 18.50 | |
| | | 11 | 2462 | 17.10 | 17.50 | |
| | 802.11n-HT40 MCS0 | 3 | 2422 | 13.00 | 13.00 | 95.00 |
| | | 6 | 2437 | 17.80 | 18.00 | |
| | | 9 | 2452 | 15.10 | 15.50 | |
| | 802.11ac-VHT20 MCS0 | 1 | 2412 | 15.10 | 15.50 | 98.20 |
| | | 6 | 2437 | 18.30 | 18.50 | |
| | | 11 | 2462 | 17.00 | 17.00 | |
| | 802.11ac-VHT40 MCS0 | 3 | 2422 | 12.90 | 13.00 | 95.00 |
| | | 6 | 2437 | 17.70 | 18.00 | |
| | | 9 | 2452 | 14.90 | 15.00 | |

6. References

- [1] FCC 47 CFR Part 2 "Frequency Allocations and Radio Treaty Matters; General Rules and Regulations"
- [2] ANSI/IEEE Std. C95.1-1992, "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz", September 1992
- [3] IEEE Std. 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", Sep 2013
- [4] SPEAG DASY System Handbook
- [5] FCC KDB 248227 D01 v02r02, "SAR Guidance for IEEE 802.11 (WiFi) Transmitters", Oct 2015.
- [6] FCC KDB 447498 D01 v06, "Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies", Oct 2015
- [7] FCC KDB 648474 D04 v01r03, "SAR Evaluation Considerations for Wireless Handsets", Oct 2015.
- [8] FCC KDB 941225 D07 v01r02, " SAR Evaluation Procedures for UMPC Mini-Tablet Devices", Oct 2015.
- [9] FCC KDB 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.
- [10] FCC KDB 865664 D02 v01r02, "RF Exposure Compliance Reporting and Documentation Considerations" Oct 2015.