

TEST REPORT

FCC MPE Test for SL300

APPLICANT
PASSTECH CO., LTD

REPORT NO.
HCT-RF-2108-FC039

DATE OF ISSUE
August 25, 2021

Tested by
Jin Gwan Lee



Technical Manager
Jong Seok Lee



HCT CO., LTD.
Bongjai Huh
BongJai Huh / CEO



HCT Co., Ltd.

74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, 17383 KOREA
Tel. +82 31 634 6300 Fax. +82 31 645 6401

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| <p>TEST REPORT</p> <p>FCC MPE Test for SL300</p> | <p>REPORT NO. HCT-RF-2108-FC039</p> <p>DATE OF ISSUE August 25, 2021</p> <p>Additional model SL300E, SL300TWR, SL300EWR</p> |
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| | |
|--------------------------------|---|
| Applicant | PASSTECH CO., LTD B-402. 215 Galmachi-ro, Jungwon-gu, Seongnam-si, Gyeonggi-do, Rep. of Korea (Zip 13217) |
| Eut Type Model Name | SLIM LOCK SL300 |
| FCC ID | W6YSL300 |
| Date of Receipt | August 09, 2021 |
| Frequency range | 2 402 MHz ~ 2 480 MHz (Bluetooth) 2 405 MHz ~ 2 480 MHz (Zigbee) |

The result shown in this test report refer only to the sample(s) tested unless otherwise stated.
This test results were applied only to the test methods required by the standard.



REVISION HISTORY

The revision history for this test report is shown in table.

| Revision No. | Date of Issue | Description |
|--------------|-----------------|-----------------|
| 0 | August 25, 2021 | Initial Release |

The measurements shown in this report were made in accordance with the procedures specified in § 2.947. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them.

HCT CO., LTD. Certifies that no party to this application has subject to a denial of Federal benefits that includes FCC benefits pursuant to section 5301 of the Anti-Drug Abuse Act of 1998, 21 U.S. C.853(a)

If this report is required to confirmation of authenticity, please contact to www.hct.co.kr



RF Exposure Statement

1. Limit

According to § 1.1310, § 2.1091 RF exposure is calculated.

(B) Limits for General Population/Uncontrolled Exposures

| Frequency range (MHz) | Electric field Strength (V/m) | Magnetic field Strength (A/m) | Power density (mW/cm ²) | Averaging time (minutes) |
|-----------------------|-------------------------------|-------------------------------|-------------------------------------|--------------------------|
| 0.3 - 1.34..... | 614 | 1.63 | *(100) | 30 |
| 1.34 - 30..... | 824/f | 2.19/f | *(180/ f ²) | 30 |
| 30 - 300..... | 27.5 | 0.073 | 0.2 | 30 |
| 300 - 1500..... | | | f/1500 | 30 |
| 1500 - 100.000..... | | | 1.0 | 30 |

F = frequency in MHz

* = Plane-wave equivalent power density

2. Maximum Permissible Exposure Prediction

Prediction of MPE limit at a given distance

$$S = PG/4\pi R^2$$

S = Power density

P = Power input to antenna

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

R = Distance to the center of radiation of the antenna

3. RESULTS

3-1. Zigbee

| | | |
|---|-------------|--------------------|
| Max Peak output Power at antenna input terminal | 4.00 | dBm |
| Max Peak output Power at antenna input terminal | 2.51 | mW |
| Prediction distance | 20.00 | cm |
| Prediction frequency | 2405 – 2480 | MHz |
| Antenna Gain(typical) | 3.50 | dBi |
| Antenna Gain(numeric) | 2.239 | - |
| Power density at prediction frequency(S) | 0.0011 | mW/cm ² |
| MPE limit for uncontrolled exposure at prediction frequency | 1.0000 | mW/cm ² |

2.1091

| | | |
|-----------|-------|-------|
| EIRP | 7.50 | (dBm) |
| ERP | 5.35 | (dBm) |
| ERP | 0.003 | (W) |
| ERP Limit | 3.00 | (W) |
| MARGIN | 29.42 | (dB) |

3-1. BT LE

| | | |
|---|-------------|--------------------|
| Max Peak output Power at antenna input terminal | -5.00 | dBm |
| Max Peak output Power at antenna input terminal | 0.32 | mW |
| Prediction distance | 20.00 | cm |
| Prediction frequency | 2402 – 2480 | MHz |
| Antenna Gain(typical) | 3.50 | dBi |
| Antenna Gain(numeric) | 2.239 | - |
| Power density at prediction frequency(S) | 0.0001 | mW/cm ² |
| MPE limit for uncontrolled exposure at prediction frequency | 1.0000 | mW/cm ² |

2.1091

| | | |
|-----------|-------|-------|
| EIRP | -1.50 | (dBm) |
| ERP | -3.65 | (dBm) |
| ERP | 0.00 | (W) |
| ERP Limit | 3.00 | (W) |
| MARGIN | 38.42 | (dB) |



3-1. NFC

| | | |
|---|------------------|--------------------|
| NFC Fundamental Peak Power : | 4.49 | dBuV/m |
| EIRP | -90.74 | dBm |
| EIRP | 0.0000000008433 | mW |
| Prediction distance | 20.00 | cm |
| Power density at prediction frequency(S) | 0.00000000000002 | mW/cm ² |
| MPE limit for uncontrolled exposure at prediction frequency | 1.000 | mW/cm ² |