



# RF EXPOSURE REPORT

FCC ID : QYL8265BB1  
Equipment : Notebook  
Brand Name : Getac  
Model Name : B300  
Applicant : Getac Technology Corporation.  
5F., Building A, No. 209, Sec.1, Nangang  
Rd., Nangang Dist., Taipei City 11568, Taiwan, R.O.C.  
Standard : FCC 47 CFR Part 2 (2.1093)

We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this variant 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

**SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory**  
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



## **Table of Contents**

|                                                                     |    |
|---------------------------------------------------------------------|----|
| 1. Guidance Applied.....                                            | 4  |
| 2. Equipment Under Test (EUT) Information.....                      | 4  |
| 2.1 General Information .....                                       | 4  |
| 3. Maximum RF average output power among production units(dBm)..... | 5  |
| 4. Antenna Location.....                                            | 8  |
| 5. SAR Test Exclusions Applied .....                                | 9  |
| 6. Simultaneous Transmission Analysis .....                         | 10 |
| 7. References.....                                                  | 11 |



## History of this test report

| Report No.  | Version | Description             | Issued Date   |
|-------------|---------|-------------------------|---------------|
| FA372342-19 | 01      | Initial issue of report | Aug. 16, 2019 |
|             |         |                         |               |
|             |         |                         |               |
|             |         |                         |               |
|             |         |                         |               |
|             |         |                         |               |
|             |         |                         |               |
|             |         |                         |               |
|             |         |                         |               |
|             |         |                         |               |
|             |         |                         |               |
|             |         |                         |               |
|             |         |                         |               |
|             |         |                         |               |
|             |         |                         |               |



## **1. Guidance Applied**

The Specific Absorption Rate (SAR) testing specification, method, and procedure for this device is in accordance with the following standards:

- FCC 47 CFR Part 2 (2.1093)
- ANSI/IEEE C95.1-1992
- FCC KDB 865664 D02 SAR Reporting v01r02
- FCC KDB 447498 D01 General RF Exposure Guidance v06
- FCC KDB 616217 D04 SAR for laptop and tablets v01r02

## **2. Equipment Under Test (EUT) Information**

### **2.1 General Information**

| Product Feature & Specification         |                                                                                                                                                                                                                                             |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Equipment Name                          | Notebook                                                                                                                                                                                                                                    |
| Brand Name                              | Getac                                                                                                                                                                                                                                       |
| Model Name                              | B300                                                                                                                                                                                                                                        |
| FCC ID                                  | QYL8265BB1                                                                                                                                                                                                                                  |
| Integrated WLAN Module                  | Brand Name: Intel<br>Model Name: 8265NGW                                                                                                                                                                                                    |
| Wireless Technology and Frequency Range | WLAN 2.4GHz Band: 2412 MHz ~ 2472 MHz<br>WLAN 5.2GHz Band: 5180 MHz ~ 5240 MHz<br>WLAN 5.3GHz Band: 5260 MHz ~ 5320 MHz<br>WLAN 5.5GHz Band: 5500 MHz ~ 5720 MHz<br>WLAN 5.8GHz Band: 5745 MHz ~ 5825 MHz<br>Bluetooth: 2402 MHz ~ 2480 MHz |
| Mode                                    | 802.11a/b/g/n/ac HT20/HT40/VHT20/VHT40/VHT80<br>Bluetooth BR/EDR/LE                                                                                                                                                                         |
| EUT Stage                               | Production Unit                                                                                                                                                                                                                             |

**Remark:** The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

| B300      | SKU B           |
|-----------|-----------------|
| CPU       | i7-8550U        |
| RAM       | 16GB x 2        |
| Storage   | 256GB           |
| Media Bay | DVD +Smart Card |
| BT/WIFI   | Support         |
| GPS       | Not Support     |

**Reviewed by: Jason Wang**

**Report Producer: Wan Liu**



### 3. Maximum RF average output power among production units(dBm)

| Band / Mode | Average Power (dBm) |    |    |      |
|-------------|---------------------|----|----|------|
|             | BR / EDR            |    |    | LE   |
|             | 1M                  | 2M | 3M | GFSK |
| Bluetooth   | 10                  | 6  | 6  | 5    |

|             | Mode              | Channel | Frequency (MHz) | Ant 1         | Ant 2         | Ant 1+2       |
|-------------|-------------------|---------|-----------------|---------------|---------------|---------------|
|             |                   |         |                 | Tune-Up Limit | Tune-Up Limit | Tune-Up Limit |
| 2.4GHz WLAN | 802.11b 1Mbps     | 1       | 2412            | 26.0          | 19.50         | 25.00         |
|             |                   | 6       | 2437            | 27.0          | 21.50         | 28.00         |
|             |                   | 11      | 2462            | 26.5          | 19.50         | 25.00         |
|             |                   | 12      | 2467            | 25.0          | 18.00         | 21.00         |
|             |                   | 13      | 2472            | 15.5          | 9.50          | 15.00         |
|             | 802.11g 6Mbps     | 1       | 2412            | 24.5          | 18.00         | 24.00         |
|             |                   | 6       | 2437            | 26.5          | 20.00         | 27.00         |
|             |                   | 11      | 2462            | 25.0          | 17.50         | 25.00         |
|             |                   | 12      | 2467            | 21.0          | 14.00         | 21.00         |
|             |                   | 13      | 2472            | 5.5           | 2.50          | 7.00          |
|             | 802.11n-HT20 MCS0 | 1       | 2412            | 24.0          | 17.50         | 24.00         |
|             |                   | 6       | 2437            | 26.5          | 20.00         | 26.00         |
|             |                   | 11      | 2462            | 24.5          | 17.50         | 25.00         |
|             |                   | 12      | 2467            | 20.0          | 14.00         | 20.00         |
|             |                   | 13      | 2472            | 6.4           | 2.50          | 4.50          |

| 5.2GHz WLAN         | Mode | Channel | Frequency (MHz) | Ant 2         | Ant 1+2       |
|---------------------|------|---------|-----------------|---------------|---------------|
|                     |      |         |                 | Tune-Up Limit | Tune-Up Limit |
| 802.11a 6Mbps       |      | 36      | 5180            | 14.50         | 17.00         |
|                     |      | 40      | 5200            | 14.50         | 17.00         |
|                     |      | 44      | 5220            | 14.00         | 17.00         |
|                     |      | 48      | 5240            | 14.00         | 17.00         |
| 802.11n-HT20 MCS0   |      | 36      | 5180            | 14.00         | 16.50         |
|                     |      | 40      | 5200            | 14.00         | 16.50         |
|                     |      | 44      | 5220            | 14.00         | 16.50         |
|                     |      | 48      | 5240            | 14.00         | 16.50         |
| 802.11n-HT40 MCS0   |      | 38      | 5190            | 14.00         | 16.50         |
|                     |      | 46      | 5230            | 14.00         | 16.50         |
| 802.11ac-VHT20 MCS0 |      | 36      | 5180            | 14.00         | 16.50         |
|                     |      | 40      | 5200            | 14.00         | 16.50         |
|                     |      | 44      | 5220            | 14.00         | 16.50         |
|                     |      | 48      | 5240            | 14.00         | 16.50         |
| 802.11ac-VHT40 MCS0 |      | 38      | 5190            | 14.00         | 16.50         |
|                     |      | 46      | 5230            | 14.00         | 16.50         |
| 802.11ac-VHT80 MCS0 |      | 42      | 5210            | 14.00         | 16.00         |

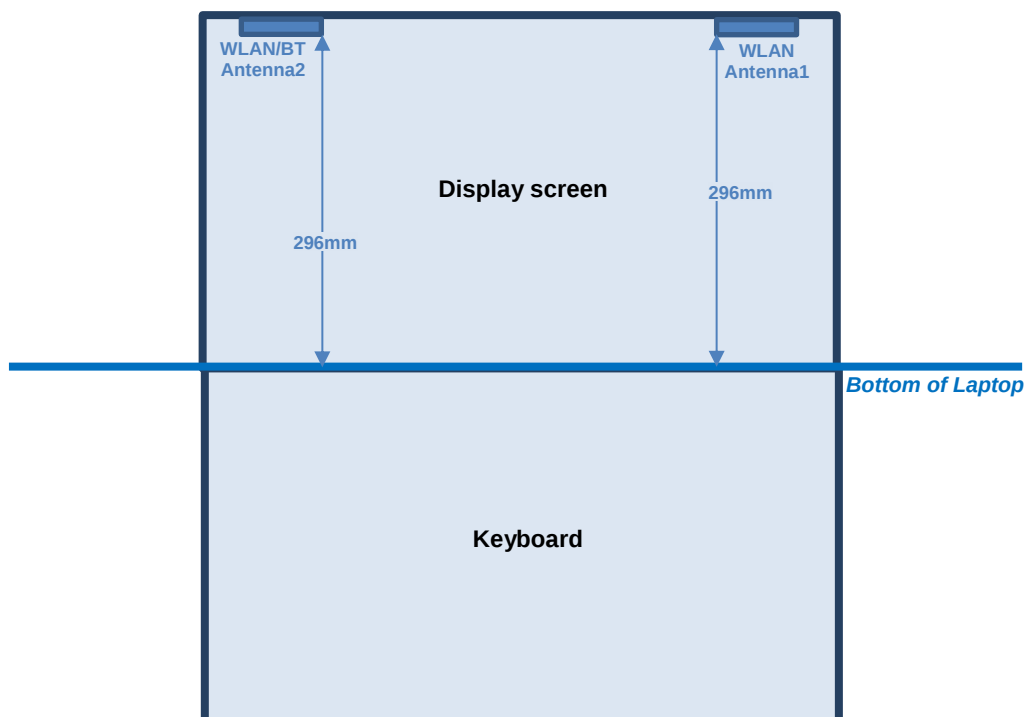
| 5.3GHz WLAN         | Mode | Channel | Frequency (MHz) | Ant 2         | Ant 1+2       |
|---------------------|------|---------|-----------------|---------------|---------------|
|                     |      |         |                 | Tune-Up Limit | Tune-Up Limit |
| 802.11a 6Mbps       |      | 52      | 5260            | 14.00         | 17.00         |
|                     |      | 56      | 5280            | 14.00         | 17.00         |
|                     |      | 60      | 5300            | 14.00         | 17.00         |
|                     |      | 64      | 5320            | 14.00         | 17.00         |
| 802.11n-HT20 MCS0   |      | 52      | 5260            | 14.00         | 17.00         |
|                     |      | 56      | 5280            | 14.00         | 17.00         |
|                     |      | 60      | 5300            | 14.00         | 17.00         |
|                     |      | 64      | 5320            | 14.00         | 17.00         |
| 802.11n-HT40 MCS0   |      | 54      | 5270            | 14.00         | 17.00         |
|                     |      | 62      | 5310            | 14.00         | 17.00         |
| 802.11ac-VHT20 MCS0 |      | 52      | 5260            | 14.00         | 17.00         |
|                     |      | 56      | 5280            | 14.00         | 17.00         |
|                     |      | 60      | 5300            | 14.00         | 17.00         |
|                     |      | 64      | 5320            | 14.00         | 17.00         |
| 802.11ac-VHT40 MCS0 |      | 54      | 5270            | 14.00         | 17.00         |
|                     |      | 62      | 5310            | 14.00         | 17.00         |
| 802.11ac-VHT80 MCS0 |      | 58      | 5290            | 14.00         | 17.00         |



|             | Mode                | Channel | Frequency (MHz) | Ant 2         | Ant 1+2       |
|-------------|---------------------|---------|-----------------|---------------|---------------|
|             |                     |         |                 | Tune-Up Limit | Tune-Up Limit |
| 5.5GHz WLAN | 802.11a 6Mbps       | 100     | 5500            | 15.00         | 18.50         |
|             |                     | 116     | 5580            | 15.00         | 18.50         |
|             |                     | 124     | 5620            | 15.00         | 18.50         |
|             |                     | 132     | 5660            | 15.00         | 18.50         |
|             |                     | 140     | 5700            | 15.00         | 18.50         |
|             |                     | 144     | 5720            | 15.00         | 18.00         |
|             | 802.11n-HT20 MCS0   | 100     | 5500            | 14.50         | 18.50         |
|             |                     | 116     | 5580            | 14.00         | 18.00         |
|             |                     | 124     | 5620            | 14.00         | 18.00         |
|             |                     | 132     | 5660            | 15.00         | 18.50         |
|             |                     | 140     | 5700            | 15.00         | 18.50         |
|             |                     | 144     | 5720            | 14.00         | 18.50         |
|             | 802.11n-HT40 MCS0   | 102     | 5510            | 14.50         | 18.00         |
|             |                     | 110     | 5550            | 15.00         | 18.00         |
|             |                     | 126     | 5630            | 14.50         | 18.50         |
|             |                     | 134     | 5670            | 14.50         | 18.50         |
|             |                     | 142     | 5710            | 14.50         | 18.50         |
|             | 802.11ac-VHT20 MCS0 | 100     | 5500            | 14.50         | 18.50         |
|             |                     | 116     | 5580            | 14.00         | 18.00         |
|             |                     | 124     | 5620            | 14.00         | 18.00         |
|             |                     | 132     | 5660            | 15.00         | 18.50         |
|             |                     | 140     | 5700            | 15.00         | 18.50         |
|             |                     | 144     | 5720            | 14.00         | 17.50         |
|             | 802.11ac-VHT40 MCS0 | 102     | 5510            | 14.50         | 18.00         |
|             |                     | 110     | 5550            | 15.00         | 18.00         |
|             |                     | 126     | 5630            | 14.50         | 18.50         |
|             |                     | 134     | 5670            | 14.50         | 18.50         |
|             |                     | 142     | 5710            | 14.50         | 18.50         |
|             | 802.11ac-VHT80 MCS0 | 106     | 5530            | 14.50         | 18.00         |
|             |                     | 122     | 5610            | 14.00         | 18.00         |
|             |                     | 138     | 5690            | 15.50         | 18.50         |

|             | Mode                | Channel | Frequency (MHz) | Ant 2         | Ant 1+2       |
|-------------|---------------------|---------|-----------------|---------------|---------------|
|             |                     |         |                 | Tune-Up Limit | Tune-Up Limit |
| 5.8GHz WLAN | 802.11a 6Mbps       | 149     | 5745            | 14.50         | 18.50         |
|             |                     | 157     | 5785            | 14.50         | 18.50         |
|             |                     | 165     | 5825            | 14.50         | 17.50         |
|             | 802.11n-HT20 MCS0   | 149     | 5745            | 14.50         | 18.50         |
|             |                     | 157     | 5785            | 14.50         | 18.00         |
|             |                     | 165     | 5825            | 14.50         | 17.50         |
|             | 802.11n-HT40 MCS0   | 151     | 5755            | 14.50         | 18.00         |
|             |                     | 159     | 5795            | 14.50         | 17.50         |
|             | 802.11ac-VHT20 MCS0 | 149     | 5745            | 14.50         | 18.50         |
|             |                     | 157     | 5785            | 14.50         | 18.00         |
|             |                     | 165     | 5825            | 14.50         | 17.50         |
|             | 802.11ac-VHT40 MCS0 | 151     | 5755            | 14.50         | 18.00         |
|             |                     | 159     | 5795            | 14.50         | 17.50         |
|             | 802.11ac-VHT80 MCS0 | 155     | 5775            | 14.00         | 17.50         |

#### 4. Antenna Location



## 5. SAR Test Exclusions Applied

**General Note:**

- The below table, when the distance is < 50 mm exclusion threshold is "Ratio", when the distance is > 50 mm exclusion threshold is "mW"
- Maximum power is the source-based time-average power and represents the maximum RF output power among production units
- Per KDB 447498 D01v06, for larger devices, the test separation distance of adjacent edge configuration is determined by the closest separation between the antenna and the user.
- Per KDB 447498 D01v06, standalone SAR test exclusion threshold is applied; If the test separation distance is < 5mm, 5mm is used to determine SAR exclusion threshold.
- Per KDB 447498 D01v06, the 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at *test separation distances* ≤ 50 mm are determined by:
 
$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR}$$
  - f(GHz) is the RF channel transmit frequency in GHz
  - Power and distance are rounded to the nearest mW and mm before calculation
  - The result is rounded to one decimal place for comparison
- Per KDB 447498 D01v06, at 100 MHz to 6 GHz and for *test separation distances* > 50 mm, the SAR test exclusion threshold is determined according to the following
  - [Threshold at 50 mm in step 1) + (test separation distance - 50 mm) · ( f(MHz)/150)] mW, at 100 MHz to 1500 MHz
  - [Threshold at 50 mm in step 1) + (test separation distance - 50 mm) · 10] mW at > 1500 MHz and ≤ 6 GHz

| Exposure Position | Wireless Interface      | BT      | 2.4GHz WLAN ANT 1 | 2.4GHz WLAN ANT 2 | 2.4GHz WLAN ANT 1+2 | 5GHz WLAN ANT 2 | 5GHz WLAN ANT 1+2 |
|-------------------|-------------------------|---------|-------------------|-------------------|---------------------|-----------------|-------------------|
|                   | Calculated Frequency    | 2480MHz | 2462MHz           | 2462MHz           | 2462MHz             | 5825MHz         | 5825MHz           |
|                   | Maximum power (dBm)     | 10      | 27                | 21.5              | 28                  | 15.5            | 18.5              |
|                   | Maximum rated power(mW) | 10.0    | 501.0             | 141.0             | 631.0               | 35.0            | 71.0              |
| Bottom of Laptop  | Separation distance(mm) | 296.0   | 296.0             | 296.0             | 296.0               | 296.0           | 296.0             |
|                   | exclusion threshold     | 2555.0  | 2556.0            | 2556.0            | 2556.0              | 2522.0          | 2522.0            |
|                   | Testing required?       | No      | No                | No                | No                  | No              | No                |

**6. Simultaneous Transmission Analysis**

| NO. | Simultaneous Transmission Configurations | Body |
|-----|------------------------------------------|------|
| 1.  | WLAN ANT1 + WLAN ANT2                    | Yes  |
| 2.  | WLAN ANT1 + BT ANT2                      | Yes  |

**General Note:**

1. WLAN and Bluetooth share the same antenna 2, and cannot transmit simultaneously.
2. EUT will choose either WLAN 2.4GHz or WLAN 5GHz according to the network signal condition; therefore, 2.4GHz WLAN and 5GHz WLAN will not operate simultaneously at any moment.
3. Per KDB 447498 D01v06 SAR test exclusion in section6, the standalone SAR testing is not required for this device, 0.4 W/kg is used for simultaneous transmission analysis when the test separation distance is > 50mm.

| Exposure Position | 1                       | 2             | 1+2<br>Summed<br>1g SAR (W/kg) |
|-------------------|-------------------------|---------------|--------------------------------|
|                   | WLAN Ant 1              | WLAN/BT Ant 2 |                                |
|                   | Estimated 1g SAR (W/kg) |               |                                |
| Body              | 0.4                     | 0.4           | 0.8                            |

**Conclusion:**

In the table above, the summed SAR is compliant with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6 W/kg) specified in FCC 47 CFR part 2 (2.1093) and ANSI/IEEE C95.1-1992.



## **7. 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] SPEAG DASY System Handbook
- [4] FCC KDB 447498 D01 v06, "Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies", Oct 2015
- [5] FCC KDB 616217 D04 v01r02, "SAR Evaluation Considerations for Laptop, Notebook, Netbook and Tablet Computers", Oct 2015
- [6] FCC KDB 865664 D02 v01r02, "RF Exposure Compliance Reporting and Documentation Considerations" Oct 2015.