



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.

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Approved by: Cona Huang / Deputy Manager

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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 Model Name: 8265NGW
Wireless Technology and Frequency Range	WLAN 2.4GHz Band: 2412 MHz ~ 2472 MHz WLAN 5.2GHz Band: 5180 MHz ~ 5240 MHz WLAN 5.3GHz Band: 5260 MHz ~ 5320 MHz WLAN 5.5GHz Band: 5500 MHz ~ 5720 MHz WLAN 5.8GHz Band: 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz
Mode	802.11a/b/g/n/ac HT20/HT40/VHT20/VHT40/VHT80 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

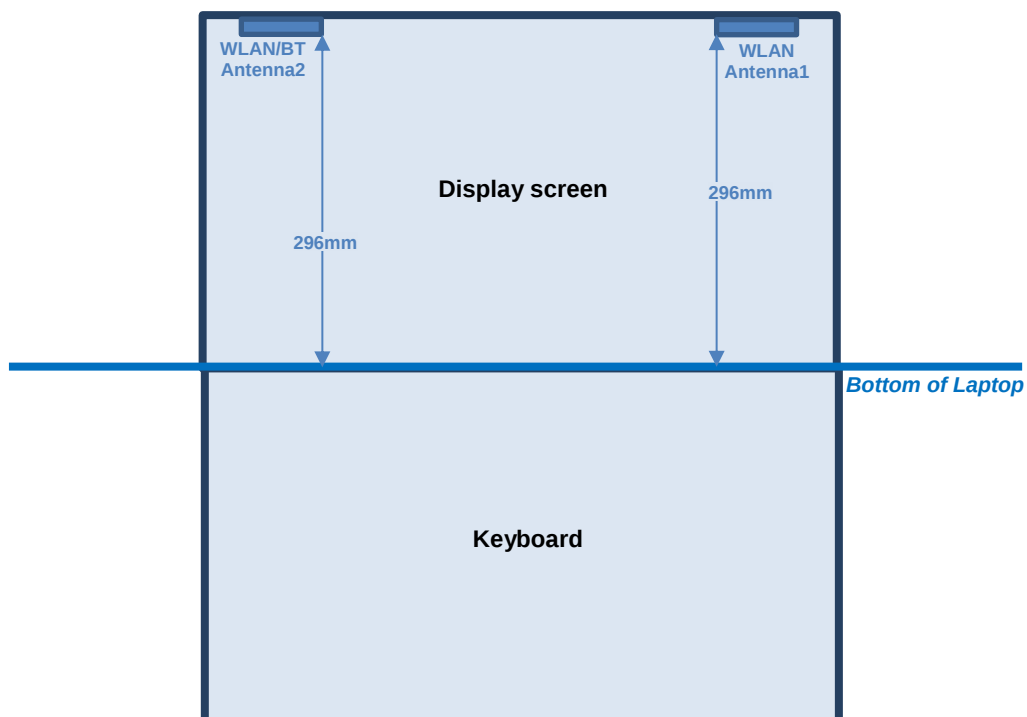
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 2	Ant 1+2
				Tune-Up Limit	Tune-Up Limit
802.11a 6Mbps		52	5260	14.00	17.00
		56	5280	14.00	17.00
		60	5300	14.00	17.00
		64	5320	14.00	17.00
802.11n-HT20 MCS0		52	5260	14.00	17.00
		56	5280	14.00	17.00
		60	5300	14.00	17.00
		64	5320	14.00	17.00
802.11n-HT40 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:

1. The below table, when the distance is < 50 mm exclusion threshold is "Ratio", when the distance is > 50 mm exclusion threshold is "mW"
2. Maximum power is the source-based time-average power and represents the maximum RF output power among production units
3. 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.
4. 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.
5. 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
6. 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
 - a) [Threshold at 50 mm in step 1) + (test separation distance - 50 mm) · (f(MHz)/150)] mW, at 100 MHz to 1500 MHz
 - b) [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 Summed 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.