



Test Report No.:
FCC2025-0008-H

TEST REPORT

FCC ID : 2BOP508182020
Applicant : Open Launch LLC
Product Name : Nova
Model No. : Nova

CVC Testing Technology Co., Ltd.

Product Name	Nova	Trade Mark	
Type/Model	Nova	Sample Status	/
Applicant	Open Launch LLC		
Applicant Address	103 Forrest St Lafayette LA 70501		
Manufacturer	Huizhou Boshijie Technology Co., Ltd		
Manufacturer Address	Boshijie Industrial Park, No. 1 Huifeng West Third Road, Zhongkai High-tech Zone, Huizhou City, Guangdong, China. 516006		
Factory	Huizhou Boshijie Technology Co., Ltd		
Factory Address	Boshijie Industrial Park, No. 1 Huifeng West Third Road, Zhongkai High-tech Zone, Huizhou City, Guangdong, China. 516006		
Sample Identification	1-1	Test Item	RF Exposure
Tested According To	FCC Part 2 (Section 2.1093) KDB 447498 D04 Interim General RF Exposure Guidance v01 IEEE C95.1-2019		
Receiving Date	2025-02-19	Completing Date	2025-04-26
Test conclusion	The equipment under test was found to comply with the requirements of the standards applied. Final Verdict: Pass. Seal of CVC Date of issue: 2025-06-06		
Abbreviations: / Pass= passed Fail = failed N/A= not applicable			
This test report relates only to the EUT, and shall not be reproduced except in full, without written approval of CVC.			

Approved by:

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TABLE OF CONTENTS

RELEASE CONTROL RECORD 4

1. GENERAL PRODUCT INFORMATION5

 1.1 GENERAL INFORMATION 5

2. HUMAN EXPOSURE ASSESSMENT7

 2.1 RF EXPOSURE TEST EXEMPTIONS FOR SINGLE SOURCE 7

 2.1.1 1-MW TEST EXEMPTION 7

 2.1.2 SAR-BASED EXEMPTION7

 2.1.3 MPE-BASED EXEMPTION 8

 2.1.4 MPE EXPOSURE LIMITS 9

 2.2 RF EXPOSURE TEST EXEMPTIONS FOR SIMULTANEOUS TRANSMISSION SOURCES11

 2.2.1 1-MW TEST EXEMPTION FOR MULTIPLE SOURCES11

 2.2.2 SIMULTANEOUS TRANSMISSION WITH BOTH SAR-BASED AND MPE-BASED TEST EXEMPTIONS 11

 2.3 CLASSIFICATION12

3. RF OUTPUT POWER 13

4. TEST RESULTS19

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FCC2025-0008-H	Original release	June.06,2025

1. General Product Information

1.1 General information

Product Name	Nova
Model No.	Nova
Additional model	/
Power Supply	DC 12.0V $\overline{\text{---}}$ 5.0A From Adapter
Serial Number(SN)	B110C460
Antenna Type	Internal antenna
Modulation Type	GFSK for BT-LE 802.11b:CCK, DQPSK, DBPSK for DSSS 802.11g/n:64QAM, 16QAM, QPSK, BPSK for OFDM 802.11a/n(HT20/HT40): 64QAM, 16QAM, QPSK, BPSK for OFDM 802.11ac(VHT20/VHT40/VHT80): 256QAM,64QAM,16QAM, QPSK,BPSK for OFDM Radar(60GHz) for Pulse Modulation
Antenna Gain	WIFI2.4GHz: Ant1:2.50 dBi, Ant2:2.50 dBi (provided by client) Bluetooth: 2.50 dBi (provided by client) U-NII-1: Ant1:7.0 dBi, Ant2:7.0 dBi (provided by client) U-NII-2A: Ant1:7.0 dBi, Ant2:7.0 dBi (provided by client) U-NII-2C: Ant1:7.0 dBi, Ant2:7.0 dBi (provided by client) U-NII-3: Ant1:7.0 dBi, Ant2:7.0 dBi (provided by client)
Beamforming gain	Unsupported (provided by client)
Frequency Range	Bluetooth(LE_1M, LE_2M): 2402~2480MHz IEEE 802.11b/g/n(HT20): 2412~2462MHz IEEE 802.11n(HT40): 2422~2452MHz U-NII-1: For 20MHz:5180-5240MHz For 40MHz:5190-5230MHz For 80MHz:5210MHz U-NII-2A: For 20MHz:5260-5320MHz For 40MHz:5270-5310MHz For 80MHz:5290MHz U-NII-2C: For 20MHz:5500-5700MHz For 40MHz:5510-5670MHz For 80MHz:5530-5610MHz U-NII-3: For 20MHz:5745-5825MHz For 40MHz:5755-5795MHz For 80MHz:5775MHz Radar(60GHz):57 ~ 64GHz
Max. Conducted Power	Bluetooth(LE): 6.12 dBm WIFI2.4G:24.78dBm U-NII-1: 15.94 dBm U-NII-2A: 14.60 dBm U-NII-2C: 18.16 dBm U-NII-3: 20.01 dBm Radar 1#(60GHz):9.22 dBm(EIRP) Radar 2#(60GHz):8.77 dBm(EIRP)
Operate Temp.Range	-15°C~+45°C

Note:

1. The information of the EUT is declared by the manufacturer.
2. The laboratory is not responsible for the product technical specification provided by the client.
3. The product models of this application are: Nova. All the tests carried out on model Nova.
4. EUT photo refer to report (Report NO.:FCC2025-0008-EUT).
5. There are two power supplies, from different manufacturers.

Power supply information		
No.	Manufacturer	MODEL
1	MOSO Power	MS-Z5000R120-060B0-Q
2	Yingyuan	CGSW65C-120-5000II

6. The EUT have MIMO function, provides 2 completed transmitter and 2 receiver.

2. Human Exposure Assessment

2.1 RF Exposure Test Exemptions for Single Source

2.1.1 1-mW Test Exemption

The 1 mW Test Exemption of § 1.1307(b)(3)(i)(A) applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power of no more than 1 mW, regardless of separation distance.

The 1 mW blanket exemption applies at separation distances less than 0.5 cm, including where there is no separation. This exemption shall not be used in conjunction with other exemption criteria other than those for multiple RF sources in paragraph § 1.1307(b)(3)(ii)(A).

The 1 mW exemption is independent of service type and covers the full range of 100 kHz to 100 GHz, but it shall not be used in conjunction with other exemption criteria or in devices with higher-power transmitters operating in the same time-averaging period. Exposure from such higher-power transmitters would invalidate the underlying assumption that exposure from the lower-power transmitter is the only contributor to SAR in the relevant volume of tissue.

2.1.2 SAR-Based Exemption

A more comprehensive exemption, considering a variable power threshold that depends on both the *separation distance* and power, is provided in § 1.1307(b)(3)(i)(B). This exemption is applicable to the frequency range between 300 MHz and 6 GHz, with *test separation distances* between 0.5 cm and 40 cm, and for all RF sources in fixed, mobile, and portable device exposure conditions.

Accordingly, a RF source is considered an *RF exempt device* if its available maximum time averaged (matched conducted) power or its effective radiated power (ERP), whichever is greater, are below a specified threshold. This exemption threshold was derived based on general population 1-g SAR requirements.

General frequency and separation-distance dependent MPE-based effective radiated power (ERP) thresholds are in Table B.1 [Table 1 of § 1.1307(b)(1)(i)(C)] to support an exemption from further evaluation from 300 kHz through 100 GHz.

The table applies to any RF source (i.e., single fixed, mobile, and portable transmitters) and specifies power and distance criteria for each of the five frequency ranges used for the MPE limits. These criteria apply at separation distances from any part of the radiating structure of at least $\lambda/2\pi$. The thresholds are based on the general population MPE limits with a single perfect reflection, outside of the reactive near-field, and in the main beam of the radiator.

For mobile devices that are not exempt per Table B.1 [Table 1 of § 1.1307(b)(1)(i)(C)] at distances from 20 cm to 40 cm and in 0.3 GHz to 6 GHz, evaluation of compliance with the exposure limits in § 1.1310 is necessary if the ERP of the device is greater than $ERP_{20\text{cm}}$ in Formula (B.1) [repeated from § 2.1091(c)(1) and § 1.1307(b)(1)(i)(B)]

TABLE B.1—THRESHOLDS FOR SINGLE RF SOURCES
SUBJECT TO ROUTINE ENVIRONMENTAL EVALUATION

RF Source Frequency			Minimum Distance			Threshold ERP
f_L MHz		f_H MHz	$\lambda_L / 2\pi$		$\lambda_H / 2\pi$	W
0.3	-	1.34	159m	-	35.6m	$1920R^2$
1.34	-	30	35.6m	-	1.6m	$3450R^2/f^2$
30	-	300	1.6m	-	159mm	$3.83R^2$
300	-	1500	159mm	-	31.8mm	$0.0128R^2/f^2$
1500	-	100000	31.8mm	-	0.5mm	$19.2R^2$
Subscripts L and H are low and high; λ is wavelength. From § 1.1307(b)(3)(i)(C), modified by adding Minimum Distance columns.						

2.1.3 MPE-Based Exemption

An alternative to the SAR-based exemption is provided in § 1.1307(b)(3)(i)(C), for a much wider frequency range, from 300 kHz to 100 GHz, applicable for separation distances greater or equal to $\lambda/2\pi$, where λ is the free-space operating wavelength in meters. The MPE-based test exemption condition is in terms of ERP, defined as the product of the maximum antenna gain and the delivered maximum time-averaged power.¹⁰ For this case, a RF source is an *RF exempt device* if its ERP (watts) is no more than a frequency-dependent value, as detailed tabular form in Appendix B. These limits have been derived based on the basic specifications on Maximum Permissible Exposure (MPE) considered for the FCC rules in § 1.1310(e)(1).

SAR-based thresholds are derived based on frequency, power, and separation distance of the RF source. The formula defines the thresholds in general for either available maximum time-averaged power or maximum time-averaged ERP, whichever is greater.

If the ERP of a device is not easily determined, such as for a portable device with a small form factor, the applicant may use the available maximum time-averaged power exclusively if the device antenna or radiating structure does not exceed an electrical length of $\lambda/4$.

As for devices with antennas of length greater than $\lambda/4$ where the gain is not well defined, but always less than that of a half-wave dipole (length $\lambda/2$), the available maximum time-averaged power generated by the device may be used in place of the maximum time-averaged ERP, where that value is not known.

The separation distance is the smallest distance from any part of the antenna or radiating structure for all persons, during operation at the applicable ERP. In the case of mobile or portable devices, the separation distance is from the outer housing of the device where it is closest to the antenna.

The SAR-based exemption formula of § 1.1307(b)(3)(i)(B), repeated here as Formula (B.2), applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power or effective radiated power (ERP), whichever is greater, of less than or equal to the threshold P_{th} (mW). This method shall only be used at separation distances from 0.5 cm to 40 cm and at frequencies from 0.3 GHz to 6 GHz (inclusive). P_{th} is given by Formula (B.2).

$$ERP_{20cm}(mW) = \begin{cases} 2040f_{(GHz)} & 0.3GHz \leq f \leq 1.5GHz \\ 3060 & 1.5GHz \leq f \leq 6GHz \end{cases} \quad (B.1)$$

$$P_{th}(mW) = \begin{cases} ERP_{20cm} (d_{(cm)}/20cm)^x & d \leq 20cm \\ ERP_{20cm} & 20cm < d \leq 40cm \end{cases} \quad (B. 2)$$

Where

$$x = -\log_{10} \left(\frac{60}{ERP_{20cm} \sqrt{f_{(GHz)}}} \right)$$

and f is in GHz, d is the separation distance (cm), and ERP_{20cm} is per Formula (B.1).

2.1.4 MPE exposure limits

Devices operating in standalone mobile device exposure conditions may contain a single transmitter or multiple transmitters that do not transmit simultaneously. Mobile devices, as defined in § 2.1091 along with their applicable RF exposure limits, are characterized by the requirement of maintaining a minimum *test separation distance* ≥ 20 cm between any radiating structure of the device and nearby persons; to apply only mobile device (MPE) exposure limits. This *test separation distance* requirement must be defined for the most conservative exposure conditions, and must be fully supported for all the operating and installation configurations of the transmitter and its antenna(s), according to the source-based time-averaged maximum power requirements of § 2.1091(d)(2).

$$S = \frac{PG}{4\pi R^2}$$

Where

S: power density in mW/cm²

P: power input to the antenna in mW

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 in cm

Note:

1. Mobile or fixed location transmitters, minimum separation distance is 20 cm, even if calculations indicate MPE distance is less.
2. The Numeric Gain calculated by $10^{(ant.Gain*(dBi)/10)}$.
3. Each band max power which perform MPE of any configurations.

Table 1 to § 1.1310(e)(1) - Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(i)Limits for Occupational/Controlled Exposure				
0.3~3.0	614	1.63	*(100)	≤ 6
3.0~30	1842/f	4.89/f	*(900/f ²)	< 6
30~300	61.4	0.163	1.0	< 6
300~1500			f/300	< 6
1500~100000			5	< 6
(ii)Limits for General Population/Uncontrolled Exposure				
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
1500~100000			1.0	< 30
f=frequency in MHz; *=Plane wave equivalent power density.				

2.2 RF Exposure Test Exemptions for Simultaneous Transmission Sources

2.2.1 1-mW Test Exemption for Multiple Sources

As discussed in § 1.1307(b)(3)(ii)(A), the 1-mW exemption intended for single transmitters may be also applied to simultaneous transmission conditions, within the same host device, according one of the following criteria:

- a) When maximum available power each individual transmitting antenna within the same time averaging period is ≤ 1 mW, and the nearest parts of the antenna structures of the simultaneously operating transmitters are separated by at least 2 cm.
- b) When the aggregate maximum available power of all transmitting antennas is ≤ 1 mW in the same time-averaging period.

This exemption may not be combined with any other exemption.

2.2.2 Simultaneous Transmission with both SAR-based and MPE-Based Test Exemptions

This case is described in detail in § 1.1307(b)(3)(ii)(B) and covers the situations where both SAR-based and MPE-based exemption may be considered for test exemption in fixed, mobile, or portable device exposure conditions. For these cases, a device with multiple RF sources transmitting simultaneously will be considered an *RF exempt device* if the condition of Formula (1) is satisfied.

The sum of the ratios of the applicable terms for SAR-based, MPE-based and measured SAR or MPE shall be less than 1, to determine simultaneous transmission exposure compliance.

$$\sum_{i=1}^a \frac{P_i}{P_{th,i}} + \sum_{j=1}^b \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^c \frac{Evaluated_k}{Exposure Limit_k} \leq 1$$

Where

a is number of fixed, mobile, or portable RF sources claiming exemption using the §1.1307(b)(3)(i)(B) formula for P_{th} , including existing exempt transmitters and those being added.

b is number of fixed, mobile, or portable RF sources claiming exemption using the applicable § 1.1307(b)(3)(i)(C) Table 1 formula for Threshold ERP, including existing exempt transmitters and those being added.

c is number of existing fixed, mobile, or portable RF sources with known evaluation for the specified minimum distance.

P_i is the available maximum time-averaged power or the ERP, whichever is greater, for fixed, mobile, or portable RF source i at a distance between 0.5 cm and 40 cm (inclusive).

$P_{th,i}$ is the exemption threshold power (P_{th}) according to the § 1.1307(b)(3)(i)(B) formula for fixed, mobile, or portable RF source i.

ERP_j is the available maximum time-averaged power or the ERP, whichever is greater, of fixed, mobile, or portable RF source j.

$ERP_{th,j}$ is exemption threshold ERP for fixed, mobile, or portable RF source j, at a distance of at least $\lambda/2\pi$, according to the applicable § 1.1307(b)(3)(i)(C) Table 1 formula at the location in question.

$Evaluated_k$ is the maximum reported SAR or MPE of fixed, mobile, or portable RF source k either in the device or at the transmitter site from an existing evaluation.

$Exposure Limit_k$ is either the general population/uncontrolled maximum permissible exposure (MPE) or specific absorption rate (SAR) limit for each fixed, mobile, or portable sources, as applicable.

2.3 CLASSIFICATION

The antenna of this product, under normal use condition, is 20cm away from the body of the user. So, this device is classified as Mobile Device.

Method in name of	calculation method
Method 1	1-mW Test Exemption
Method 2	SAR-Based Exemption
Method 3	MPE-Based Exemption
Method 4	MPE exposure limits
Method 5	1-mW Test Exemption for Multiple Sources
Method 6	Simultaneous Transmission with both SAR-based and MPE-Based Test Exemptions

3. RF Output Power

The tuned conducted Average Power (declared by client)

Mode	Frequency(MHz)	Target Power(dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
11B Ant1	2412-2462MHz	18.5	±1.5	17	20
11G Ant1	2412-2462MHz	21.5	±0.5	21	22
11N20 Ant1	2412-2462MHz	20.0	±1.0	19	21
11N40 Ant1	2422-2452MHz	20.5	±0.5	20	21
11B Ant2	2412-2462MHz	18.5	±0.5	18	19
11G Ant2	2412-2462MHz	23.0	±1.0	22	24
11N20 Ant2	2412-2462MHz	22.0	±1.0	21	23
11N40 Ant2	2422-2452MHz	22.5	±0.5	22	23
11A Ant1	5180~5240MHz	14.0	±1.0	13	15
11A Ant1	5260-5320MHz	13.5	±0.5	13	14
11A Ant1	5500-5700MHz	13.0	±1.0	12	14
11A Ant1	5745~5825MHz	14.5	±0.5	14	15
11N20 Ant1	5180~5240MHz	13.0	±1.0	12	14
11N20 Ant1	5260-5320MHz	12.0	±1.0	11	13
11N20 Ant1	5500-5700MHz	12.0	±1.0	11	13
11N20 Ant1	5745~5825MHz	14.0	±1.0	13	15
11N40 Ant1	5190~5230MHz	13.5	±0.5	13	14
11N40 Ant1	5270-5310MHz	12.5	±0.5	12	13
11N40 Ant1	5510-5670MHz	12.0	±1.0	11	13
11N40 Ant1	5755~5795MHz	14.0	±1.0	13	15
11AC20 Ant1	5180~5240MHz	13.0	±1.0	12	14
11AC20 Ant1	5260-5320MHz	12.5	±0.5	12	13
11AC20 Ant1	5500-5700MHz	12.0	±1.0	11	13
11AC20 Ant1	5745~5825MHz	15.0	±2.0	13	17
11AC40 Ant1	5190~5230MHz	10.5	±0.5	10	11
11AC40 Ant1	5270-5310MHz	10.0	±1.0	9	11
11AC40 Ant1	5510-5670MHz	9.5	±1.5	8	11
11AC40 Ant1	5755~5795MHz	8.5	±0.5	8	9
11AC80 Ant1	5180-5240MHz	10.5	±0.5	10	11
11AC80 Ant1	5260-5320MHz	10.5	±0.5	10	11
11AC80 Ant1	5530-5610MHz	8	±2.0	6	10
11AC80 Ant1	5745~5825MHz	8.5	±0.5	8	9
11A Ant2	5180~5240MHz	12.0	±1.0	11	13
11A Ant2	5260-5320MHz	10.5	±1.5	9	12
11A Ant2	5500-5700MHz	15.0	±2.0	13	17
11A Ant2	5745~5825MHz	16.5	±0.5	16	17
11N20 Ant2	5180~5240MHz	10.5	±1.5	9	12
11N20 Ant2	5260-5320MHz	9.0	±2.0	7	11

Mode	Frequency(MHz)	Target Power(dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
11N20 Ant2	5500-5700MHz	14.0	±1.0	13	15
11N20 Ant2	5745~5825MHz	17.5	±1.5	16	19
11N40 Ant2	5190~5230MHz	10.5	±1.5	9	12
11N40 Ant2	5270-5310MHz	8.5	±1.5	7	10
11N40 Ant2	5510-5670MHz	15.0	±2.0	13	17
11N40 Ant2	5755~5795MHz	17.5	±1.5	16	19
11AC20 Ant2	5180~5240MHz	10.0	±2.0	8	12
11AC20 Ant2	5260-5320MHz	9.0	±1.0	8	10
11AC20 Ant2	5500-5700MHz	14.0	±1.0	13	15
11AC20 Ant2	5745~5825MHz	17.5	±1.5	16	19
11AC40 Ant2	5190~5230MHz	10.5	±0.5	10	11
11AC40 Ant2	5270-5310MHz	10.5	±0.5	10	11
11AC40 Ant2	5510-5670MHz	9.5	±1.5	8	11
11AC40 Ant2	5755~5795MHz	8.5	±0.5	8	9
11AC80 Ant2	5180-5240MHz	11.5	±0.5	11	12
11AC80 Ant2	5260-5320MHz	10.5	±0.5	10	11
11AC80 Ant2	5530-5610MHz	10.0	±1.0	9	11
11AC80 Ant2	5745~5825MHz	8.5	±0.5	8	9
BLE_1M	2402~2480MHz	6.0	±1.0	5	7
BLE_2M	2402~2480MHz	6.0	±1.0	5	7

The conducted power turn-up tolerance reference manufacturer specification.

TestMode	Antenna	Channel	Peak Power[dBm]	Conducted Limit[dBm]	Verdict
11B	Ant1	2412	18.11	≤30.00	PASS
	Ant2	2412	18.34	≤30.00	PASS
	Ant1	2437	19.04	≤30.00	PASS
	Ant2	2437	18.71	≤30.00	PASS
	Ant1	2462	17.48	≤30.00	PASS
	Ant2	2462	18.90	≤30.00	PASS
11G	Ant1	2412	21.34	≤30.00	PASS
	Ant2	2412	22.94	≤30.00	PASS
	Ant1	2437	21.30	≤30.00	PASS
	Ant2	2437	22.99	≤30.00	PASS
	Ant1	2462	21.84	≤30.00	PASS
	Ant2	2462	23.40	≤30.00	PASS
11N20MIMO	Ant1	2412	19.92	≤30.00	PASS
	Ant2	2412	21.87	≤30.00	PASS
	total	2412	24.01	≤30.00	PASS
	Ant1	2437	20.25	≤30.00	PASS
	Ant2	2437	22.12	≤30.00	PASS
	total	2437	24.30	≤30.00	PASS
	Ant1	2462	20.78	≤30.00	PASS
	Ant2	2462	22.51	≤30.00	PASS
11N40MIMO	total	2462	24.74	≤30.00	PASS
	Ant1	2422	20.21	≤30.00	PASS
	Ant2	2422	22.34	≤30.00	PASS
	total	2422	24.41	≤30.00	PASS
	Ant1	2437	20.33	≤30.00	PASS
	Ant2	2437	22.35	≤30.00	PASS
	total	2437	24.47	≤30.00	PASS
	Ant1	2452	20.64	≤30.00	PASS
BLE_1M	Ant1	2440	6.01	≤30.00	PASS
		2480	6.04	≤30.00	PASS
		2402	5.84	≤30.00	PASS
BLE_2M	Ant1	2440	6.04	≤30.00	PASS
		2480	6.12	≤30.00	PASS
		2402	5.92	≤30.00	PASS
11A	Ant1	5180	14.45	≤22.98	PASS
	Ant2	5180	12.09	≤22.98	PASS
	Ant1	5200	14.07	≤22.98	PASS
	Ant2	5200	12.35	≤22.98	PASS
	Ant1	5240	13.74	≤22.98	PASS
	Ant2	5240	11.11	≤22.98	PASS
	Ant1	5260	13.53	≤22.98	PASS
	Ant2	5260	11.27	≤22.98	PASS
	Ant1	5280	13.78	≤22.98	PASS
	Ant2	5280	11.18	≤22.98	PASS
	Ant1	5320	13.15	≤22.98	PASS
	Ant2	5320	9.83	≤22.98	PASS
	Ant1	5500	13.53	≤22.98	PASS
	Ant2	5500	13.95	≤22.95	PASS
	Ant1	5580	12.60	≤22.98	PASS
	Ant2	5580	16.01	≤22.98	PASS
	Ant1	5700	13.33	≤22.98	PASS
	Ant2	5700	13.87	≤22.98	PASS
	Ant1	5745	14.61	≤29.00	PASS

TestMode	Antenna	Channel	Peak Power[dBm]	Conducted Limit[dBm]	Verdict
	Ant2	5745	16.82	≤29.00	PASS
	Ant1	5785	14.78	≤29.00	PASS
	Ant2	5785	16.25	≤29.00	PASS
	Ant1	5825	14.02	≤29.00	PASS
	Ant2	5825	16.25	≤29.00	PASS
11N20MIMO	Ant1	5180	12.67	≤19.97	PASS
	Ant2	5180	11.44	≤19.97	PASS
	total	5180	15.11	≤19.97	PASS
	Ant1	5200	12.41	≤19.97	PASS
	Ant2	5200	11.28	≤19.97	PASS
	total	5200	14.89	≤19.97	PASS
	Ant1	5240	12.77	≤19.97	PASS
	Ant2	5240	9.21	≤19.97	PASS
	total	5240	14.36	≤19.97	PASS
	Ant1	5260	12.66	≤19.97	PASS
	Ant2	5260	10.18	≤19.97	PASS
	total	5260	14.60	≤19.97	PASS
	Ant1	5280	12.65	≤19.97	PASS
	Ant2	5280	9.35	≤19.97	PASS
	total	5280	14.32	≤19.97	PASS
	Ant1	5320	11.93	≤19.97	PASS
	Ant2	5320	7.71	≤19.97	PASS
	total	5320	13.32	≤19.97	PASS
	Ant1	5500	11.89	≤19.97	PASS
	Ant2	5500	13.04	≤19.97	PASS
	total	5500	15.51	≤19.97	PASS
	Ant1	5580	11.31	≤19.97	PASS
	Ant2	5580	14.73	≤19.97	PASS
	total	5580	16.36	≤19.97	PASS
	Ant1	5700	12.65	≤19.97	PASS
	Ant2	5700	13.45	≤19.97	PASS
	total	5700	16.08	≤19.97	PASS
	Ant1	5745	13.99	≤25.99	PASS
	Ant2	5745	18.34	≤25.99	PASS
	total	5745	19.70	≤25.99	PASS
	Ant1	5785	14.19	≤25.99	PASS
	Ant2	5785	16.01	≤25.99	PASS
	total	5785	18.20	≤25.99	PASS
	Ant1	5825	13.28	≤25.99	PASS
	Ant2	5825	17.37	≤25.99	PASS
	total	5825	18.80	≤25.99	PASS
11N40MIMO	Ant1	5190	13.83	≤19.97	PASS
	Ant2	5190	11.79	≤19.97	PASS
	total	5190	15.94	≤19.97	PASS
	Ant1	5230	13.01	≤19.97	PASS
	Ant2	5230	9.38	≤19.97	PASS
	total	5230	14.57	≤19.97	PASS
	Ant1	5270	12.57	≤19.97	PASS
	Ant2	5270	9.49	≤19.97	PASS
	total	5270	14.31	≤19.97	PASS
	Ant1	5310	12.19	≤19.97	PASS
	Ant2	5310	7.81	≤19.97	PASS
	total	5310	13.54	≤19.97	PASS
	Ant1	5510	11.49	≤19.97	PASS
	Ant2	5510	13.22	≤19.97	PASS
	total	5510	15.45	≤19.97	PASS
	Ant1	5550	11.84	≤19.97	PASS

TestMode	Antenna	Channel	Peak Power[dBm]	Conducted Limit[dBm]	Verdict
	Ant2	5550	14.46	≤19.97	PASS
	total	5550	16.35	≤19.97	PASS
	Ant1	5670	12.52	≤19.97	PASS
	Ant2	5670	16.77	≤19.97	PASS
	total	5670	18.16	≤19.97	PASS
	Ant1	5755	13.87	≤25.99	PASS
	Ant2	5755	18.80	≤25.99	PASS
	total	5755	20.01	≤25.99	PASS
	Ant1	5795	14.36	≤25.99	PASS
	Ant2	5795	16.30	≤25.99	PASS
	total	5795	18.45	≤25.99	PASS
11AC20MIMO	Ant1	5180	12.82	≤19.97	PASS
	Ant2	5180	11.30	≤19.97	PASS
	total	5180	15.14	≤19.97	PASS
	Ant1	5200	12.49	≤19.97	PASS
	Ant2	5200	10.98	≤19.97	PASS
	total	5200	14.81	≤19.97	PASS
	Ant1	5240	12.82	≤19.97	PASS
	Ant2	5240	8.80	≤19.97	PASS
	total	5240	14.27	≤19.97	PASS
	Ant1	5260	12.64	≤19.97	PASS
	Ant2	5260	9.78	≤19.97	PASS
	total	5260	14.45	≤19.97	PASS
	Ant1	5280	12.54	≤19.97	PASS
	Ant2	5280	9.04	≤19.97	PASS
	total	5280	14.14	≤19.97	PASS
	Ant1	5320	12.20	≤19.97	PASS
	Ant2	5320	8.02	≤19.97	PASS
	total	5320	13.60	≤19.97	PASS
	Ant1	5500	11.88	≤19.97	PASS
	Ant2	5500	13.04	≤19.97	PASS
	total	5500	15.51	≤19.97	PASS
	Ant1	5580	11.41	≤19.97	PASS
	Ant2	5580	14.85	≤19.97	PASS
	total	5580	16.47	≤19.97	PASS
	Ant1	5700	12.52	≤19.97	PASS
	Ant2	5700	13.59	≤19.97	PASS
	total	5700	16.10	≤19.97	PASS
	Ant1	5745	13.89	≤25.99	PASS
	Ant2	5745	18.36	≤25.99	PASS
	total	5745	19.69	≤25.99	PASS
	Ant1	5785	16.36	≤25.99	PASS
	Ant2	5785	16.20	≤25.99	PASS
	total	5785	19.29	≤25.99	PASS
	Ant1	5825	15.82	≤25.99	PASS
	Ant2	5825	17.90	≤25.99	PASS
	total	5825	19.99	≤25.99	PASS
11AC40MIMO	Ant1	5190	10.25	≤19.97	PASS
	Ant2	5190	10.19	≤19.97	PASS
	total	5190	13.23	≤19.97	PASS
	Ant1	5230	10.50	≤19.97	PASS
	Ant2	5230	10.75	≤19.97	PASS
	total	5230	13.64	≤19.97	PASS
	Ant1	5270	10.41	≤19.97	PASS
	Ant2	5270	10.56	≤19.97	PASS
	total	5270	13.50	≤19.97	PASS
	Ant1	5310	9.80	≤19.97	PASS

TestMode	Antenna	Channel	Peak Power[dBm]	Conducted Limit[dBm]	Verdict
	Ant2	5310	10.09	≤19.97	PASS
	total	5310	12.96	≤19.97	PASS
	Ant1	5510	10.05	≤19.97	PASS
	Ant2	5510	10.23	≤19.97	PASS
	total	5510	13.15	≤19.97	PASS
	Ant1	5550	10.30	≤19.97	PASS
	Ant2	5550	10.46	≤19.97	PASS
	total	5550	13.39	≤19.97	PASS
	Ant1	5670	8.21	≤19.97	PASS
	Ant2	5670	8.36	≤19.97	PASS
	total	5670	11.30	≤19.97	PASS
	Ant1	5755	8.35	≤25.99	PASS
	Ant2	5755	8.58	≤25.99	PASS
	total	5755	11.48	≤25.99	PASS
	Ant1	5795	8.53	≤25.99	PASS
	Ant2	5795	8.70	≤25.99	PASS
	total	5795	11.63	≤25.99	PASS
11AC80MIMO	Ant1	5210	10.88	≤19.97	PASS
	Ant2	5210	11.19	≤19.97	PASS
	total	5210	14.05	≤19.97	PASS
	Ant1	5290	10.12	≤19.97	PASS
	Ant2	5290	10.41	≤19.97	PASS
	total	5290	13.28	≤19.97	PASS
	Ant1	5530	6.00	≤19.97	PASS
	Ant2	5530	10.42	≤19.97	PASS
	total	5530	11.76	≤19.97	PASS
	Ant1	5610	9.10	≤19.97	PASS
	Ant2	5610	9.39	≤19.97	PASS
	total	5610	12.26	≤19.97	PASS
	Ant1	5775	8.12	≤25.99	PASS
	Ant2	5775	8.27	≤25.99	PASS
	total	5775	11.21	≤25.99	PASS

Note: The relevant measured result has the offset with cable loss already.

4. Test Results

Mode	Maximum source-based time averaged conducted output power (dBm)	ERP (dBm)	ERP (mW)	Minimum separation distance (cm)	Select calculation method	Limit for Exemption (mW)	Verdict
WIFI2.4GHz Ant1	21	24.36	272.8978	20	Method 3	3060	Exempt from SAR/MPE
WIFI2.4GHz Ant2	23	26.36	432.5138	20	Method 3	3060	Exempt from SAR/MPE
WIFI5GHz Ant1	17	24.86	306.1963	20	Method 3	3060	Exempt from SAR/MPE
WIFI5GHz Ant2	19	26.86	485.2885	20	Method 3	3060	Exempt from SAR/MPE
Bluetooth (LE)	7	7.35	5.4325	20	Method 3	3060	Exempt from SAR/MPE
Mode	EIRP(dBm)	EIRP(mW/cm ²)		Minimum separation distance (cm)	Select calculation method	Limit for Exemption (mW/cm ²)	Verdict
Radar 1#(60GHz)	9.22	0.0017		20	Method 4	10	Exempt from SAR/MPE
Radar 2#(60GHz)	8.77	0.0015		20	Method 4	10	Exempt from SAR/MPE
Mode		Calculation for Simultaneous Transmission			Select calculation method	Limit for Exemption	Verdict
Simultaneous Transmission		0.4913			Method 6	1	Exempt from SAR/MPE

Note: This device has two antennas, two for WIFI transmission.

$$\text{Simultaneous Transmission} = (272.8978/3060) + (432.5138/3060) + (306.1963/3060) + (485.2885/3060) + (5.4325/3060) + (0.0017/10) + (0.0015/10) = 0.4913$$

ERP=Conducted output power+Gain-2.15.

Therefore this device complies with FCC's RF radiation exposure limits for general population without SAR evaluation.

_____ No Body Text Below _____

Important

1. The test report is invalid without the official stamp of CVC;
2. Any part photocopies of the test report are forbidden without the written permission from CVC;
3. The test report is invalid without the signatures of Author and Reviewer;
4. The test report is invalid if altered;
5. Objections to the test report must be submitted to CVC within 15 days;
6. Generally, commission test is responsible for the tested samples only;
7. As for the test result, “—” or “ N/A” means “not applicable”, “ / ”means “not testing”, “P” means “pass” and “F” means “fail”.

Address: No.3,Tiantaiyi Road, Kaitai Avenue, Science City, Guangzhou, China (Test location)

Post Code: 510663 Tel: 020-32293888

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