RF Exposure Evaluation

For

Shenzhen Dianye Technology Co., Ltd.

Mini pc

Test Model: ARB17M2

Additional Model No.: Please Refer to Page 6

Prepared for	:	Shenzhen Dianye Technology Co., Ltd.
Address	:	506, Building 1, Yibaolai Industrial City, Qiaotou Community, Fuhai Street, Bao'an District, Shenzhen, China
Prepared by	:	Shenzhen LCS Compliance Testing Laboratory Ltd.
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Web	:	www.LCS-cert.com
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Date of receipt of test sample	:	June 09, 2025
Number of tested samples	:	2
Sample No.	:	A250606123-1, A250606123-2
Serial number	:	Prototype
Date of Test	:	June 09, 2025 ~ June 24, 2025
Date of Report	:	June 25, 2025

RF Exposure Evaluation

Report Reference No.	**:**	**LCSA06065088EF**
Date of Issue.....	:	June 25, 2025
Testing Laboratory Name	**:**	**Shenzhen LCS Compliance Testing Laboratory Ltd.**
Address.....	:	101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China
Testing Location/ Procedure.....	:	Full application of Harmonised standards ■ Partial application of Harmonised standards □ Other standard testing method □
Applicant's Name.....	**:**	**Shenzhen Dianye Technology Co., Ltd.**
Address.....	:	506, Building 1, Yibaolai Industrial City, Qiaotou Community, Fuhai Street, Bao'an District, Shenzhen, China
Test Specification		
Standard	:	FCC KDB publication 447498 D01 General RF Exposure Guidance v06 FCC CFR 47 part1 1.1310 FCC CFR 47 part2 2.1091
Test Report Form No.	**:**	TRF-4-E-214 A/0
TRF Originator	:	Shenzhen LCS Compliance Testing Laboratory Ltd.
Master TRF.....	:	Dated 2011-03

EUT Description.....	**:**	**Mini pc**
Trade Mark.....	:	N/A
Test Model	:	ARB17M2
Ratings.....	:	Please Refer to Page 6
**Result ..... **	**:**	**PASS**

Compiled by:	**Supervised by:**	**Approved by:**
Jack Liu/Administrator	Cary Luo/ Technique principal	Gavin Liang/ Manager

RF Exposure Evaluation

Test Report No. : **LCSA06065088EF**	June 25, 2025 Date of issue

EUT.....	:	Mini pc
Test Model.....	:	ARB17M2
Applicant.....	**:**	**Shenzhen Dianye Technology Co., Ltd.**
Address.....	:	506, Building 1, Yibaolai Industrial City, Qiaotou Community, Fuhai Street, Bao'an District, Shenzhen, China
Telephone.....	:	/
Fax.....	:	/
Manufacturer.....	**:**	**Shenzhen Dianye Technology Co., Ltd.**
Address.....	:	506, Building 1, Yibaolai Industrial City, Qiaotou Community, Fuhai Street, Bao'an District, Shenzhen, China
Telephone.....	:	/
Fax.....	:	/
Factory.....	**:**	**Shenzhen Dianye Technology Co., Ltd.**
Address.....	:	506, Building 1, Yibaolai Industrial City, Qiaotou Community, Fuhai Street, Bao'an District, Shenzhen, China
Telephone.....	:	/
Fax.....	:	/

Test Result:	**PASS**

The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

Revision History

Report Version	Issue Date	Revision Content	Revised By
000	June 25, 2025	Initial Issue	--

TABLE OF CONTENTS

Description **Page**

1. Product Information

EUT	:	Mini pc
Test Model	:	ARB17M2
Additional Model No.	:	*****B17*****("*"= 0-9, A-Z, a-z, -, +, blank or any character)
Model Declaration	:	PCB board, structure and internal of these model(s) are the same, So no additional models were tested
Ratings	:	Input: 20.0V⎓5.0A For AC Adapter: Input:100-240V~, 50/60Hz, 2.0A Max Output: 20.0V⎓5.0A
Hardware Version	:	AR17_MB_R10(NPB016V20)
Software Version	:	SMART 500A-002
Bluetooth	:	
Frequency Range	:	2402MHz~2480MHz
Channel Number	:	79 channels for Bluetooth V5.3 (DSS) 40 channels for Bluetooth V5.3 (DTS)
Channel Spacing	:	1MHz for Bluetooth V5.3 (DSS) 2MHz for Bluetooth V5.3 (DTS)
Modulation Type	:	GFSK, π/4-DQPSK, 8-DPSK for Bluetooth V5.3 (DSS) GFSK for Bluetooth V5.3 (DTS)
Bluetooth Version	:	V5.3
Antenna Description	:	Ant1: PIFA Antenna, 2.73dBi (max.)
WIFI(2.4G Band)	:	
Frequency Range	:	2412MHz~2462MHz
Channel Spacing	:	5MHz
Channel Number	:	11 Channels for 20MHz bandwidth (2412~2462MHz) 7 Channels for 40MHz bandwidth (2422~2452MHz)
Modulation Type	:	IEEE 802.11b: DSSS (CCK, DQPSK, DBPSK) IEEE 802.11g: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ax: OFDMA (1024QAM, 256QAM, 64QAM, 16QAM, QPSK, BPSK)
Antenna Description	:	Ant1: PIFA Antenna, 2.73dBi(Max.) Ant2: PIFA Antenna, 2.95dBi(Max.)
WIFI(5.2G Band)	:	
Frequency Range	:	5180MHz~5240MHz
Channel Number	:	4 Channels for 20MHz bandwidth(5180MHz~5240MHz) 2 channels for 40MHz bandwidth(5190MHz~5230MHz) 1 channels for 80MHz bandwidth(5210MHz)
Modulation Type	:	IEEE 802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ac: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ax: OFDMA (1024QAM, 256QAM, 64QAM, 16QAM, QPSK, BPSK)
Antenna Description	:	Ant1: PIFA Antenna, 4.58dBi(Max.) Ant2: PIFA Antenna, 2.93dBi(Max.)
WIFI(5.8G Band)	:	
Frequency Range	:	5745MHz~5825MHz

Channel Number	:	5 channels for 20MHz bandwidth(5745MHz~5825MHz) 2 channels for 40MHz bandwidth(5755MHz~5795MHz) 1 channels for 80MHz bandwidth(5775MHz)
Modulation Type	:	IEEE 802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ac: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ax: OFDMA (1024QAM, 256QAM, 64QAM, 16QAM, QPSK, BPSK)
Antenna Description	:	Ant1: PIFA Antenna, 4.58dBi(Max.) Ant2: PIFA Antenna, 2.93dBi(Max.)
Exposure category	:	General population/uncontrolled environment
EUT Type	:	Production Unit
Device Type	:	Mobile Device

2. Evaluation Method

Systems operating under the provisions of FCC 47 CFR section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.
In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as mobile device whereby a distance of 0.2m normally can be maintained between the user and the device, and below RF Permissible Exposure limit shall comply with.
In accordance with KDB447498D01 for Simultaneous transmission MPE test exclusion applies when the sum of the MPE ratios for all simultaneous transmitting antennas incorporated in a host device, based on the calculated/estimated, numerically modelled or measured field strengths or power density, is ≤ 1.0. The MPE ratio of each antenna is determined at the minimum test separation distance required by the operating configurations and exposure conditions of the host device, according to the ratio of field strengths or power density to MPE limit, at the test frequency. Either the maximum peak or spatially averaged results from measurements or numerical simulations may be used to determine the MPE ratios. Spatial averaging does not apply when MPE is estimated using simple calculations based on far-field plane-wave equivalent conditions. The antenna installation and operating requirements for the host device must meet the minimum test separation distances required by all antennas, in both standalone and simultaneous transmission operations, to satisfy compliance.

3. Limit

3. 1 Refer Evaluation Method

ANSI C95.1–2019: IEEE Standard for Safety Levels with Respect to Human Exposure to Electric, Magnetic, and Electromagnetic Fields, 0 Hz to 300 GHz
FCC KDB publication 447498 D01 General 1 RF Exposure Guidance v06: Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies.
FCC CFR 47 part1 1.1310: Radiofrequency radiation exposure limits.
FCC CFR 47 part2 2.1091: Radiofrequency radiation exposure evaluation: mobile devices.

3. 2 Limit

Limits for Maximum Permissible Exposure (MPE)/Controlled Exposure

Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density (mW/cm^2)	Averaging Time (minute)
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 – 100,000	/	/	5	6

Limits for Maximum Permissible Exposure (MPE)/Uncontrolled Exposure

Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density (mW/cm^2)	Averaging Time (minute)
Limits for Occupational/Uncontrolled Exposure				
0.3 – 3.0	614	1.63	(100) *	30
3.0 – 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

4. MPE Calculation Method

Predication of MPE limit at a given distance
Equation from page 18 of OET Bulletin 65, Edition 97-01

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

Where: S=power density
P=power input to antenna
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

5. Antenna Information

EUT can only use antennas certificated as follows provided by manufacturer;

Internal/ External Identification	Antenna type and antenna number	Operate frequency band	Maximum antenna gain	Notes
Internal	PIFA Antenna 1	2400MHz ~ 2500MHz 5000MHz ~ 6000MHz	Bluetooth / 2.4GWIFI: 2.73dBi 5.2GWIFI: 2.73dBi 5.8GWIFI: 4.58dBi	Bluetooth/WIFI Antenna
	PIFA Antenna 2	2400MHz ~ 2500MHz 5000MHz ~ 6000MHz	2.4GWIFI: 2.95dBi 5.2GWIFI: 2.93dBi 5.8GWIFI: 2.93dBi	WIFI Antenna

6. Conducted Power

[BT]

Mode	Channel	Frequency (MHz)	Peak Conducted Output Power (dBm)
GFSK	0	2402	2.39
	39	2441	2.73
	79	2480	3.06
π/4-DQPSK	0	2402	4.52
	39	2441	4.87
	79	2480	5.22
8-DPSK	0	2402	5.30
	39	2441	5.62
	79	2480	6.09

[BLE 1M]

Mode	Channel	Frequency (MHz)	Peak Conducted Output Power (dBm)
BLE_1M	0	2402	-1.16
	19	2440	-1.54
	39	2480	-2.38

[BLE 2M]

Mode	Channel	Frequency (MHz)	Peak Conducted Output Power (dBm)
BLE_1M	0	2402	-1.07
	19	2440	-1.40
	39	2480	-2.22

[2.4G WIFI]

Mode	Channel	Frequency (MHz)	Ant1 Max Conducted Power(dBm)	Ant2 Max Conducted Power(dBm)
11B	1	2412	13.86	13.84
	6	2437	12.95	13.03
	11	2462	13.45	13.4
11G	1	2412	14.93	12.87
	6	2437	14.25	11.96
	11	2462	14.53	12.34
11N20 SISO	1	2412	14.26	13.12
	6	2437	13.5	12.15
	11	2462	15.67	14.45
11N40 SISO	3	2422	11.64	14.66
	6	2437	10.5	13.8
	9	2452	11.43	14.39
11AX20 SISO	1	2412	15.07	16.19
	6	2437	14.04	15.47

	11	2462	14.56	15.61
11AX40 SISO	3	2422	13.5	14.5
	6	2437	12.42	13.5
	9	2452	13.22	14.12

[5.2G WIFI Max Conducted Power]

Mode	Channel	Frequency (MHz)	Ant1 Max Conducted Power(dBm)	Ant2 Max Conducted Power(dBm)
11A	36	5180	12.1	11.63
	40	5200	11.66	11.49
	48	5240	11.08	9.78
11N20 SISO	36	5180	12.37	11.81
	40	5200	12.04	11.85
	48	5240	11.37	10.03
11N40 SISO	38	5190	11.16	11.5
	46	5230	10.5	10.05
11AC20 SISO	36	5180	12.26	11.81
	40	5200	12.01	11.66
	48	5240	11.38	10.02
11AC40 SISO	38	5190	11.25	11.49
	46	5230	10.51	10.01
11AC80 SISO	42	5210	9.65	10.06
11AX20 SISO	36	5180	11.37	10.94
	40	5200	11.17	10.79
	48	5240	10.45	9.01
11AX40 SISO	38	5190	10.13	10.69
	46	5230	9.33	9.24
11AX80 SISO	42	5210	7.38	8.98

[5.8G WIFI Max Conducted Power]

Mode	Channel	Frequency (MHz)	Ant1 Max Conducted Power(dBm)	Ant2 Max Conducted Power(dBm)
11A	149	5745	9.46	11.48
	157	5785	8.85	10.52
	165	5825	8.94	10.74
11N20 SISO	149	5745	9.81	11.92
	157	5785	9.23	10.77
	165	5825	9.38	11
11N40 SISO	151	5755	8.44	10.27
	159	5795	7.57	9.29
11AC20 SISO	149	5745	9.89	11.78
	157	5785	9.13	10.77
	165	5825	9.29	10.96

11AC40 SISO	151	5755	9.38	10.29
	159	5795	8.56	9.2
11AC80 SISO	155	5775	8.78	9.43
11AX20 SISO	149	5745	8.76	10.71
	157	5785	8.05	9.71
	165	5825	8.2	10.01
11AX40 SISO	151	5755	9.45	10.31
	159	5795	8.48	9.38
11AX80 SISO	155	5775	7.73	10.62

7. Manufacturing Tolerance

[BT]

GFSK (Peak)			
Channel	Channel 0	Channel 39	Channel 78
Target (dBm)	2.0	2.0	3.0
Tolerance ±(dB)	1.0	1.0	1.0
π/4DQPSK (Peak)			
Channel	Channel 0	Channel 39	Channel 78
Target (dBm)	4.0	4.0	5.0
Tolerance ±(dB)	1.0	1.0	1.0
8DPSK (Peak)			
Channel	Channel 0	Channel 19	Channel 39
Target (dBm)	5.0	5.0	6.0
Tolerance ±(dB)	1.0	1.0	1.0

[BLE 1M]

BT LE (Peak)			
Channel	Channel 0	Channel 19	Channel 39
Target (dBm)	-1.0	-1.0	-2.0
Tolerance ±(dB)	1.0	1.0	1.0

[BLE 2M]

BT LE (Peak)			
Channel	Channel 0	Channel 19	Channel 39
Target (dBm)	-1.0	-1.0	-2.0
Tolerance ±(dB)	1.0	1.0	1.0

[2.4G WIFI Ant1]

11B (Peak)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	13.0	12.0	13.0
Tolerance ±(dB)	1.0	1.0	1.0
11G (Peak)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	14.0	14.0	14.0
Tolerance ±(dB)	1.0	1.0	1.0

11N20(Peak)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	14.0	13.0	15.0
Tolerance ±(dB)	1.0	1.0	1.0
11N40(Peak)			
Channel	Channel 3	Channel 6	Channel 9
Target (dBm)	11.0	10.0	11.0
Tolerance ±(dB)	1.0	1.0	1.0
11AX20(Peak)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	15.0	14.0	14.0
Tolerance ±(dB)	1.0	1.0	1.0
11AX40(Peak)			
Channel	Channel 3	Channel 6	Channel 9
Target (dBm)	13.0	12.0	13.0
Tolerance ±(dB)	1.0	1.0	1.0

[2.4G WIFI Ant2]

11B (Peak)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	13.0	13.0	13.0
Tolerance ±(dB)	1.0	1.0	1.0
11G (Peak)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	12.0	11.0	12.0
Tolerance ±(dB)	1.0	1.0	1.0
11N20(Peak)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	13.0	12.0	14.0
Tolerance ±(dB)	1.0	1.0	1.0
11N40(Peak)			
Channel	Channel 3	Channel 6	Channel 9
Target (dBm)	14.0	13.0	14.0
Tolerance ±(dB)	1.0	1.0	1.0
11AX20(Peak)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	16.0	15.0	15.0
Tolerance ±(dB)	1.0	1.0	1.0
11AX40(Peak)			
Channel	Channel 3	Channel 6	Channel 9
Target (dBm)	14.0	13.0	14.0
Tolerance ±(dB)	1.0	1.0	1.0

[5.2G WIFI Ant1]

11A(Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	12.0	11.0	11.0

Tolerance ±(dB)	1.0	1.0	1.0
11N20(Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	12.0	12.0	11.0
Tolerance ±(dB)	1.0	1.0	1.0
11N40(Average)			
Channel	Channel 38		Channel 46
Target (dBm)	11.0		10.0
Tolerance ±(dB)	1.0		1.0
11AC20(Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	12.0	12.0	11.0
Tolerance ±(dB)	1.0	1.0	1.0
11AC40(Average)			
Channel	Channe 38		Channel 46
Target (dBm)	11.0		10.0
Tolerance ±(dB)	1.0		1.0
11AC80(Average)			
Channel	Channel 42		
Target (dBm)	9.0		
Tolerance ±(dB)	1.0		
11AX20(Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	11.0	11.0	10.0
Tolerance ±(dB)	1.0	1.0	1.0
11AX40(Average)			
Channel	Channe 38		Channel 46
Target (dBm)	10.0		9.0
Tolerance ±(dB)	1.0		1.0
11AX80(Average)			
Channel	Channel 42		
Target (dBm)	7.0		
Tolerance ±(dB)	1.0		

[5.2G WIFI Ant2]

11A(Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	11.0	11.0	9.0
Tolerance ±(dB)	1.0	1.0	1.0
11N20(Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	11.0	11.0	10.0
Tolerance ±(dB)	1.0	1.0	1.0
11N40(Average)			
Channel	Channel 38		Channel 46
Target (dBm)	11.0		10.0
Tolerance ±(dB)	1.0		1.0
11AC20(Average)			

Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	11.0	11.0	10.0
Tolerance ±(dB)	1.0	1.0	1.0
11AC40(Average)			
Channel	Channe 38		Channel 46
Target (dBm)	11.0		10.0
Tolerance ±(dB)	1.0		1.0
11AC80(Average)			
Channel	Channel 42		
Target (dBm)	10.0		
Tolerance ±(dB)	1.0		
11AX20(Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	10.0	10.0	9.0
Tolerance ±(dB)	1.0	1.0	1.0
11AX40(Average)			
Channel	Channe 38		Channel 46
Target (dBm)	10.0		9.0
Tolerance ±(dB)	1.0		1.0
11AX80(Average)			
Channel	Channel 42		
Target (dBm)	8.0		
Tolerance ±(dB)	1.0		

[5.8G WIFI Ant1]

11A (Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	9.0	8.0	8.0
Tolerance ±(dB)	1.0	1.0	1.0
11N20(Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	9.0	9.0	9.0
Tolerance ±(dB)	1.0	1.0	1.0
11N40(Average)			
Channel	Channel 151		Channel 159
Target (dBm)	8.0		7.0
Tolerance ±(dB)	1.0		1.0
11AC20(Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	9.0	9.0	9.0
Tolerance ±(dB)	1.0	1.0	1.0
11AC40(Average)			
Channel	Channe151		Channel 159
Target (dBm)	9.0		8.0
Tolerance ±(dB)	1.0		1.0
11AC80 (Average)			
Channel	Channel 155		

Target (dBm)	8.0		
Tolerance ±(dB)	1.0		
11AX20(Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	8.0	8.0	8.0
Tolerance ±(dB)	1.0	1.0	1.0
11AX40(Average)			
Channel	Channe151	Channel 159	
Target (dBm)	9.0	8.0	
Tolerance ±(dB)	1.0	1.0	
11AX80 (Average)			
Channel	Channel 155		
Target (dBm)	7.0		
Tolerance ±(dB)	1.0		

[5.8G WIFI Ant2]

11A (Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	11.0	10.0	10.0
Tolerance ±(dB)	1.0	1.0	1.0
11N20(Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	11.0	10.0	11.0
Tolerance ±(dB)	1.0	1.0	1.0
11N40(Average)			
Channel	Channel 151	Channel 159	
Target (dBm)	10.0	9.0	
Tolerance ±(dB)	1.0	1.0	
11AC20(Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	11.0	10.0	10.0
Tolerance ±(dB)	1.0	1.0	1.0
11AC40(Average)			
Channel	Channe151	Channel 159	
Target (dBm)	10.0	9.0	
Tolerance ±(dB)	1.0	1.0	
11AC80 (Average)			
Channel	Channel 155		
Target (dBm)	9.0		
Tolerance ±(dB)	1.0		
11AX20(Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	10.0	9.0	10.0
Tolerance ±(dB)	1.0	1.0	1.0
11AX40(Average)			
Channel	Channe151	Channel 159	
Target (dBm)	10.0	9.0	
Tolerance ±(dB)	1.0	1.0	

11AX80 (Average)	
Channel	Channel 155
Target (dBm)	10.0
Tolerance ±(dB)	1.0

8. Measurement Results

8.1 Standalone MPE Evaluation

As declared by the Applicant, the EUT is a wireless device used in a fix application, at least 20 cm from any body part of the user or nearby persons; from the maximum EUT RF output power, the minimum separation distance, r =20cm, as well as the gain of the used antenna refer to antenna information, the RF power density can be obtained.

[BT]

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm2)	MPE Limits (mW/cm2)
	dBm	mW				
GFSK	4.0	2.5119	2.73	1.8750	0.0009	1.0000
π/4-DQPSK	6.0	3.9811	2.73	1.8750	0.0015	1.0000
8-DPSK	7.0	5.0119	2.73	1.8750	0.0019	1.0000

[BT LE]

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm2)	MPE Limits (mW/cm2)
	dBm	mW				
BT LE	0	1.0000	2.73	1.8750	0.0004	1.0000
BT 2LE	0	1.0000	2.73	1.8750	0.0004	1.0000

[2.4G WIFI Ant1]

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm2)	MPE Limits (mW/cm2)
	dBm	mW				
IEEE 802.11b	14.0	25.1189	2.73	1.8750	0.0094	1.0000
IEEE 802.11g	15.0	31.6228	2.73	1.8750	0.0118	1.0000
IEEE 802.11n HT20	16.0	39.8107	2.73	1.8750	0.0149	1.0000
IEEE 802.11n HT40	12.0	15.8489	2.73	1.8750	0.0059	1.0000
IEEE 802.11ax HEW20	16.0	39.8107	2.73	1.8750	0.0149	1.0000
IEEE 802.11ax HEW40	14.0	25.1189	2.73	1.8750	0.0094	1.0000

[2.4G WIFI Ant2]

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm2)	MPE Limits (mW/cm2)
	dBm	mW				
IEEE 802.11b	14.0	25.1189	2.95	1.9724	0.0099	1.0000
IEEE 802.11g	13.0	19.9526	2.95	1.9724	0.0078	1.0000
IEEE 802.11n HT20	14.0	25.1189	2.95	1.9724	0.0099	1.0000
IEEE 802.11n HT40	15.0	31.6228	2.95	1.9724	0.0124	1.0000
IEEE 802.11ax HEW20	17.0	50.1187	2.95	1.9724	0.0197	1.0000
IEEE 802.11ax HEW40	15.0	31.6228	2.95	1.9724	0.0124	1.0000

[5.2G WIFI Ant1]

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm2)	MPE Limits (mW/cm2)
	dBm	mW				
IEEE 802.11a	13.0	19.9526	4.58	2.8708	0.0114	1.0000
IEEE 802.11n HT20	13.0	19.9526	4.58	2.8708	0.0114	1.0000
IEEE 802.11n HT40	12.0	15.8489	4.58	2.8708	0.0091	1.0000
IEEE 802.11ac VHT20	13.0	19.9526	4.58	2.8708	0.0114	1.0000
IEEE 802.11ac VHT40	12.0	15.8489	4.58	2.8708	0.0091	1.0000
IEEE 802.11ac VHT80	10.0	10.0000	4.58	2.8708	0.0057	1.0000

IEEE 802.11ax HEW20	12.0	15.8489	4.58	2.8708	0.0091	1.0000
IEEE 802.11ax HEW40	11.0	12.5893	4.58	2.8708	0.0072	1.0000
IEEE 802.11ax HEW80	8.0	6.3096	4.58	2.8708	0.0036	1.0000

[5.2G WIFI Ant2]

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm2)	MPE Limits (mW/cm2)
	dBm	mW				
IEEE 802.11a	12.0	15.8489	2.93	1.9634	0.0062	1.0000
IEEE 802.11n HT20	12.0	15.8489	2.93	1.9634	0.0062	1.0000
IEEE 802.11n HT40	12.0	15.8489	2.93	1.9634	0.0062	1.0000
IEEE 802.11ac VHT20	12.0	15.8489	2.93	1.9634	0.0062	1.0000
IEEE 802.11ac VHT40	12.0	15.8489	2.93	1.9634	0.0062	1.0000
IEEE 802.11ac VHT80	11.0	12.5893	2.93	1.9634	0.0049	1.0000
IEEE 802.11ax HEW20	11.0	12.5893	2.93	1.9634	0.0049	1.0000
IEEE 802.11ax HEW40	11.0	12.5893	2.93	1.9634	0.0049	1.0000
IEEE 802.11ax HEW80	9.0	7.9433	2.93	1.9634	0.0031	1.0000

[5.8G WIFI Ant1]

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm2)	MPE Limits (mW/cm2)
	dBm	mW				
IEEE 802.11a	10.0	10.0000	4.58	2.8708	0.0057	1.0000
IEEE 802.11n HT20	10.0	10.0000	4.58	2.8708	0.0057	1.0000
IEEE 802.11n HT40	9.0	7.9433	4.58	2.8708	0.0045	1.0000
IEEE 802.11ac VHT20	10.0	10.0000	4.58	2.8708	0.0057	1.0000
IEEE 802.11ac VHT40	10.0	10.0000	4.58	2.8708	0.0057	1.0000
IEEE 802.11ac VHT80	9.0	7.9433	4.58	2.8708	0.0045	1.0000
IEEE 802.11ax HEW20	9.0	7.9433	4.58	2.8708	0.0045	1.0000
IEEE 802.11ax HEW40	10.0	10.0000	4.58	2.8708	0.0057	1.0000
IEEE 802.11ax HEW80	9.0	7.9433	4.58	2.8708	0.0045	1.0000

[5.8G WIFI Ant2]

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm2)	MPE Limits (mW/cm2)
	dBm	mW				
IEEE 802.11a	12.0	15.8489	2.93	1.9634	0.0062	1.0000
IEEE 802.11n HT20	12.0	15.8489	2.93	1.9634	0.0062	1.0000
IEEE 802.11n HT40	11.0	12.5893	2.93	1.9634	0.0049	1.0000
IEEE 802.11ac VHT20	12.0	15.8489	2.93	1.9634	0.0062	1.0000
IEEE 802.11ac VHT40	11.0	12.5893	2.93	1.9634	0.0049	1.0000
IEEE 802.11ac VHT80	10.0	10.0000	2.93	1.9634	0.0039	1.0000
IEEE 802.11ax HEW20	11.0	12.5893	2.93	1.9634	0.0049	1.0000
IEEE 802.11ax HEW40	11.0	12.5893	2.93	1.9634	0.0049	1.0000
IEEE 802.11ax HEW80	11.0	12.5893	2.93	1.9634	0.0049	1.0000

Remark:
1. Output power including tune-up tolerance;
2. Output power was adjust to duty cycle at 100% if measured duty cycle less than 98%;
3. MPE evaluate distance is 20cm from user manual provide by manufacturer.

8.2 Simultaneous Transmission MPE Evaluation

The sample support one BT&BLE and one 2.4GWLAN&5.2G WLAN5.8G WLAN, another one 2.4GWLAN&5.2G WLAN&5.8G WLAN, so need consider simultaneous transmission;
Simultaneous transmission MPE
According to KDB447498 for Transmitters used in mobile exposure conditions for simultaneous transmission operations;
∑∑of MPE ratios ≤ 1.0

<the worst simultaneous transmission operations result-2.4GWIFI>

2.4GWIFI-Ant 1	2.4GWIFI-Ant 2	∑ MPE ratios	Limit	Results
0.0149	0.0197	0.0346	1.0	Pass

<the worst simultaneous transmission operations result-5GWIFI>

5GWIFI-Ant 1	5GWIFI-Ant 2	∑ MPE ratios	Limit	Results
0.0114	0.0062	0.0176	1.0	Pass

Remark:
1. Output power including tune-up tolerance;
2. BT/BLE/2.4G WIFI output power is burst peak power;
3. 5G WIFI output power is burst average power;
4. MPE evaluate distance is 20cm from user manual provide by manufacturer;
5. MPE values = $PG/4\pi R^2$
6. Both Bluetooth and WIFI cannot be transmitter simultaneously.

9. Conclusion

The measurement results comply with the FCC Limit per 47 CFR 2.1091 for the uncontrolled RF Exposure of mobile device.

10. Description of Test Facility

NVLAP Accreditation Code is 600167-0.
FCC Designation Number is CN5024.
CAB identifier is CN0071.
CNAS Registration Number is L4595.
Test Firm Registration Number: 254912.

11. Measurement Uncertainty

BT/BLE/2.4GWIFI/5.2GWIFI/5.8GWIFI:

Test Item		Frequency Range	Uncertainty	Note
Output power	:	1GHz-40GHz	±0.57dB	(1)

(1). This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

----------THE END OF REPORT----------