



RF Exposure Evaluation

For

Chengdu Zenghong Sci-tech Co.,Ltd

Touch all in one

Test Model: 2151E

Prepared for : Chengdu Zenghong Sci-tech Co.,Ltd
Address : Room 524, Floor 5, Unit 2, Building 13, No.166 Laifeng Fifth Road,
Wuhou District Chengdu, Sichuan 610045 China

Prepared by : Shenzhen LCS Compliance Testing Laboratory Ltd.
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Date of receipt of test sample : February 10, 2025
Number of tested samples : 2
Sample No. : A250110087-1, A250110087-2
Serial number : Prototype
Date of Test : February 10, 2025 ~ April 01, 2025
Date of Report : April 02, 2025



Shenzhen LCS Compliance Testing Laboratory Ltd.

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Scan code to check authenticity



RF Exposure Evaluation	
Report Reference No.	LCSA01285007EH
Date of Issue	April 02, 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	Chengdu Zenghong Sci-tech Co.,Ltd
Address	Room 524, Floor 5, Unit 2, Building 13, No.166 Laifeng Fifth Road, Wuhou District Chengdu, Sichuan 610045 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-215 A/0
TRF Originator	Shenzhen LCS Compliance Testing Laboratory Ltd.
Master TRF	Dated 2011-03
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Test Item Description.	
Trade Mark	TouchDisplays
Test Model	2151E
Ratings	Please Refer to Page 6
Result	Positive

Compiled by:

Vera Deng/ Administrator

Supervised by:

Jack Liu / Technique principal

Approved by:

Gavin Liang/ Manager



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Scan code to check authenticity



RF Exposure Evaluation

Test Report No. : LCSA01285007EH	<u>April 02, 2025</u> Date of issue
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EUT.....	: Touch all in one
Test Model.....	: 2151E
Applicant.....	: Chengdu Zenghong Sci-tech Co.,Ltd
Address.....	: Room 524, Floor 5, Unit 2, Building 13, No.166 Laifeng Fifth Road, Wuhou District Chengdu, Sichuan 610045 China
Telephone.....	: /
Fax.....	: /
Manufacturer.....	: Touchdisplays Technology Co, Ltd.
Address.....	: Room 524, Floor 5, Unit 2, Building 13, No.166 Laifeng Fifth Road, Wuhou District Chengdu, Sichuan 610045 China
Telephone.....	: /
Fax.....	: /
Factory.....	: Touchdisplays Technology Co, Ltd.
Address.....	: Room 524, Floor 5, Unit 2, Building 13, No.166 Laifeng Fifth Road, Wuhou District Chengdu, Sichuan 610045 China
Telephone.....	: /
Fax.....	: /

Test Result	Positive
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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	April 02, 2025	Initial Issue	---





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1. Product Information

EUT : Touch all in one

Test Model : 2151E

Ratings : Input: 12V $\Rightarrow$ 5.0A
For Adapter: Input:100-240V~, 50/60Hz, 2.0A
Output: 12.0V $\Rightarrow$ 5.0A

Hardware Version : AP6256

Software Version : 20 240920 release-keys

Bluetooth :

Frequency Range : 2402MHz~2480MHz

Channel Number : 79 channels for Bluetooth V5.1 (DSS)
40 channels for Bluetooth V5.1 (DTS)

Channel Spacing : 1MHz for Bluetooth V5.1 (DSS)
2MHz for Bluetooth V5.1 (DTS)

Modulation Type : GFSK, $\pi/4$ -DQPSK, 8-DPSK for Bluetooth V5.1 (DSS)
GFSK for Bluetooth V5.1 (DTS)

Bluetooth Version : V5.1

Antenna Description : terminal antenna, 2.0dBi(Max.)

WIFI(2.4G Band) :

Frequency Range : 2412MHz~2462MHz

Channel Spacing : 5MHz

Channel Number : 11 Channels for 20MHz bandwidth (2412~2462MHz)

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)

Antenna Description : terminal antenna, 2.0dBi(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/n: OFDM (64QAM, 16QAM, QPSK, BPSK)
IEEE 802.11ac: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK)

Antenna Description : terminal antenna, 2.0dBi(Max.)

WIFI(5.3G Band) :

Frequency Range : 5260MHz~5320MHz

Channel Number : 4 Channels for 20MHz bandwidth(5260MHz~5320MHz)
2 channels for 40MHz bandwidth(5270MHz~5310MHz)
1 channels for 80MHz bandwidth(5290MHz)

Modulation Type : IEEE 802.11a/n: OFDM (64QAM, 16QAM, QPSK, BPSK)
IEEE 802.11ac: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK)





Antenna Description : terminal antenna, 2.0dBi(Max.)

WIFI(5.5G Band) :

Frequency Range : 5500MHz~5700MHz

Channel Number : 11 Channels for 20MHz bandwidth(5500MHz~5700MHz)

5 Channels for 40MHz bandwidth(5510MHz~5670MHz)

2 Channels for 80MHz bandwidth(5530MHz, 5610MHz)

Modulation Type : IEEE 802.11a/n: OFDM (64QAM, 16QAM, QPSK, BPSK)

IEEE 802.11ac: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK)

Antenna Description : terminal antenna, 2.0dBi(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/n: OFDM (64QAM, 16QAM, QPSK, BPSK)

IEEE 802.11ac: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK)

Antenna Description : terminal antenna, 2.0dBi(Max.)

Exposure category : General population/uncontrolled environment

EUT Type : Production Unit

Device Type : Mobile Device

Note: For a more detailed antenna description, please refer to the antenna specifications or the antenna report provided by the customer.





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	terminal antenna	2400MHz ~ 2500MHz 5000MHz ~ 6000MHz	Bluetooth: 2.0dBi 2.4GWIFI: 2.0dBi 5GWIFI: 2.0dBii	BT/WIFI Antenna



**6. Conducted Power**

[BT]

Mode	Channel	Frequency (MHz)	Peak Conducted Output Power (dBm)
GFSK	0	2402	0.3
	39	2441	0.24
	78	2480	-1.27
$\pi/4$ DQPSK	0	2402	0.9
	39	2441	1.01
	78	2480	-0.18
8DPSK	0	2402	1.39
	19	2441	1.52
	39	2480	0.35

[BT LE 1M]

Mode	Channel	Frequency (MHz)	Peak Conducted Output Power (dBm)
GFSK	0	2402	0.95
	19	2440	0.83
	39	2480	-0.4

[BT LE 2M]

Mode	Channel	Frequency (MHz)	Peak Conducted Output Power (dBm)
GFSK	0	2402	0.87
	19	2440	0.51
	39	2480	-0.55

[2.4G WIFI]

Mode	Channel	Frequency (MHz)	Peak Conducted Output Power (dBm)
11B	1	2412	10.22
	6	2437	10.05
	11	2462	9.24
11G	1	2412	13.38
	6	2437	13.3
	11	2462	12.75
11N20 SISO	1	2412	13.83
	6	2437	13.82
	11	2462	13.35





[5.2G WIFI]

Mode	Channel	Frequency (MHz)	Max Conducted Power(dBm)
11A	36	5180	7.75
	40	5200	7.72
	48	5240	7.75
11N20 SISO	36	5180	6.42
	40	5200	6.22
	48	5240	5.89
11N40 SISO	38	5190	5.98
	46	5230	6.13
11AC20 SISO	36	5180	6.36
	40	5200	6.31
	48	5240	5.89
11AC40 SISO	38	5190	6.23
	46	5230	5.91
11AC80 SISO	42	5210	6.03

[5.3G WIFI]

Mode	Channel	Frequency (MHz)	Max Conducted Power(dBm)
IEEE 802.11a	52	5260	6.29
	60	5280	6.63
	64	5320	7.21
IEEE 802.11n HT20	52	5260	6.07
	60	5280	6.25
	64	5320	7.03
IEEE 802.11n HT40	54	5270	12.02
	62	5310	11.94
IEEE 802.11ac VHT20	52	5260	11.61
	60	5280	11.5
	64	5320	11.61
IEEE 802.11ac VHT40	54	5270	11.94
	62	5310	11.87
IEEE 802.11ac VHT80	58	5290	11.93





5.5G WIFI]

Mode	Channel	Frequency (MHz)	Max Conducted Power(dBm)
11A	100	5500	12.53
	116	5580	13.59
	140	5700	13.19
11N20 SISO	100	5500	8.46
	116	5580	7.12
	140	5700	4.17
11N40 SISO	102	5510	12.86
	110	5550	13.39
	134	5670	13.24
11AC20 SISO	100	5500	12.23
	116	5580	13.27
	140	5700	12.8
11AC40 SISO	102	5510	12.78
	110	5550	13.3
	134	5670	13.39
11AC80 SISO	106	5530	12.83
	122	5610	13.53

[5.8G WIFI]

Mode	Channel	Frequency (MHz)	Max Conducted Power(dBm)
11A	149	5745	12.08
	157	5785	12.15
	165	5825	12.09
11N20 SISO	149	5745	13.52
	157	5785	13.13
	165	5825	12.15
11N40 SISO	151	5755	13.9
	159	5795	13.06
11AC20 SISO	149	5745	13.33
	157	5785	12.94
	165	5825	11.96
11AC40 SISO	151	5755	11.29
	159	5795	13.11
11AC80 SISO	155	5775	12.69





7. Manufacturing Tolerance

[BT]

GFSK (Peak)			
Channel	Channel 0	Channel 39	Channel 78
Target (dBm)	0	0	-1.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
$\pi/4$ -DQPSK (Peak)			
Channel	Channel 0	Channel 39	Channel 78
Target (dBm)	0	1.0	0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
8DPSK (Peak)			
Channel	Channel 0	Channel 39	Channel 78
Target (dBm)	1.0	1.0	0
Tolerance $\pm$ (dB)	1.0	1.0	1.0

[BLE1M]

BT LE (Peak)			
Channel	Channel 0	Channel 19	Channel 39
Target (dBm)	0	0	0
Tolerance $\pm$ (dB)	1.0	1.0	1.0

[BLE2M]

BT LE (Peak)			
Channel	Channel 0	Channel 19	Channel 39
Target (dBm)	0	0	0
Tolerance $\pm$ (dB)	1.0	1.0	1.0

[2.4G WIFI]

11B (Peak)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	10.0	10.0	9.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11G (Peak)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	13.0	13.0	12.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N20 (Peak)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	13.0	13.0	13.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0





[5.2G WIFI]

11A (Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	7.0	7.0	7.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N20 (Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	6.0	6.0	5.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N40 (Average)			
Channel	Channel 38	Channel 46	
Target (dBm)	5.0	6.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC20 (Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	6.0	6.0	5.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC40 (Average)			
Channel	Channel 38	Channel 46	
Target (dBm)	6.0	5.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC80 (Average)			
Channel	Channel 42		
Target (dBm)	6.0		
Tolerance $\pm$ (dB)	1.0		





[5.3G WIFI]

11A (Average)			
Channel	Channel 52	Channel 60	Channel 64
Target (dBm)	6.0	6.0	7.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N HT20 (Average)			
Channel	Channel 52	Channel 60	Channel 64
Target (dBm)	6.0	6.0	7.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N HT40 (Average)			
Channel	Channel 54	Channel 62	
Target (dBm)	12.0	11.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC VHT20 (Average)			
Channel	Channel 52	Channel 60	Channel 64
Target (dBm)	11.0	11.0	11.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC VHT40 (Average)			
Channel	Channel 54	Channel 62	
Target (dBm)	11.0	11.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC VHT80 (Average)			
Channel	Channel 58		
Target (dBm)	11.0		
Tolerance $\pm$ (dB)	1.0		





[5.5G WIFI]

11A (Average)			
Channel	Channel 100	Channel 116	Channel 140
Target (dBm)	12.0	13.0	13.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N HT20 (Average)			
Channel	Channel 100	Channel 116	Channel 140
Target (dBm)	8.0	7.0	4.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N HT40 (Average)			
Channel	Channel 102	Channel 110	Channel 134
Target (dBm)	12.0	13.0	13.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC VHT20 (Average)			
Channel	Channel 100	Channel 116	Channel 140
Target (dBm)	12.0	13.0	12.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC HT40 (Average)			
Channel	Channel 102	Channel 110	Channel 134
Target (dBm)	12.0	13.0	13.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC VHT80 (Average)			
Channel	Channel 106	Channel 122	
Target (dBm)	12.0	13.0	
Tolerance $\pm$ (dB)	1.0	1.0	





[5.8G WIFI]

11A (Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	12.0	12.0	12.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N20 (Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	13.0	13.0	12.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N40 (Average)			
Channel	Channel 151	Channel 159	
Target (dBm)	13.0	13.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC20 (Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	13.0	12.0	11.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC40 (Average)			
Channel	Channel 151	Channel 159	
Target (dBm)	11.0	13.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC80 (Average)			
Channel	Channel 155		
Target (dBm)	12.0		
Tolerance $\pm$ (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, $r=20\text{cm}$, 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/cm ²)	MPE Limits (mW/cm ²)
	dBm	mW				
GFSK	1.0	1.2589	2.0	1.5849	0.0004	1.0000
$\pi/4$ -DQPSK	2.0	1.5849	2.0	1.5849	0.0005	1.0000
8-DPSK	2.0	1.5849	2.0	1.5849	0.0005	1.0000

[BT LE]

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm ²)	MPE Limits (mW/cm ²)
	dBm	mW				
BT LE 1M	1.0	1.2589	2.0	1.5849	0.0004	1.0000
BT LE 2M	1.0	1.2589	2.0	1.5849	0.0004	1.0000

[2.4G WIFI]

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm ²)	MPE Limits (mW/cm ²)
	dBm	mW				
IEEE 802.11b	11.0	12.5893	2.0	1.5849	0.0040	1.0000
IEEE 802.11g	14.0	25.1189	2.0	1.5849	0.0079	1.0000
IEEE 802.11n HT20	14.0	25.1189	2.0	1.5849	0.0079	1.0000

[5.2G WIFI]

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm ²)	MPE Limits (mW/cm ²)
	dBm	mW				
IEEE 802.11a	8.0	6.3096	2.0	1.5849	0.0020	1.0000
IEEE 802.11n HT20	7.0	5.0119	2.0	1.5849	0.0016	1.0000
IEEE 802.11n HT40	7.0	5.0119	2.0	1.5849	0.0016	1.0000
IEEE 802.11ac VHT20	7.0	5.0119	2.0	1.5849	0.0016	1.0000
IEEE 802.11ac VHT40	7.0	5.0119	2.0	1.5849	0.0016	1.0000
IEEE 802.11ac VHT80	7.0	5.0119	2.0	1.5849	0.0016	1.0000





[5.3G WIFI]

Band/Mode	RF output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm ²)	MPE Limits (mW/cm ²)
	dBm	mW				
IEEE 802.11a	8.0	6.3096	2.0	1.5849	0.0020	1.0000
IEEE 802.11n HT20	8.0	6.3096	2.0	1.5849	0.0020	1.0000
IEEE 802.11n HT40	13.0	19.9526	2.0	1.5849	0.0063	1.0000
IEEE 802.11ac VHT20	12.0	15.8489	2.0	1.5849	0.0050	1.0000
IEEE 802.11ac VHT40	12.0	15.8489	2.0	1.5849	0.0050	1.0000
IEEE 802.11ac VHT80	12.0	15.8489	2.0	1.5849	0.0050	1.0000

[5.5G WIFI]

Band/Mode	RF output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm ²)	MPE Limits (mW/cm ²)
	dBm	mW				
IEEE 802.11a	14.0	25.1189	2.0	1.5849	0.0079	1.0000
IEEE 802.11n HT20	9.0	7.9433	2.0	1.5849	0.0025	1.0000
IEEE 802.11n HT40	14.0	25.1189	2.0	1.5849	0.0079	1.0000
IEEE 802.11ac VHT20	14.0	25.1189	2.0	1.5849	0.0079	1.0000
IEEE 802.11ac VHT40	14.0	25.1189	2.0	1.5849	0.0079	1.0000
IEEE 802.11ac VHT80	14.0	25.1189	2.0	1.5849	0.0079	1.0000

[5.8G WIFI]

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm ²)	MPE Limits (mW/cm ²)
	dBm	mW				
IEEE 802.11a	13.0	19.9526	2.0	1.5849	0.0063	1.0000
IEEE 802.11n HT20	14.0	25.1189	2.0	1.5849	0.0079	1.0000
IEEE 802.11n HT40	14.0	25.1189	2.0	1.5849	0.0079	1.0000
IEEE 802.11ac VHT20	14.0	25.1189	2.0	1.5849	0.0079	1.0000
IEEE 802.11ac VHT40	14.0	25.1189	2.0	1.5849	0.0079	1.0000
IEEE 802.11ac VHT80	13.0	19.9526	2.0	1.5849	0.0063	1.0000

Remark:

1. Output power including tune-up tolerance;
2. Output power was adjusted 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 antenna. No need consider simultaneous transmission.

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/5GWIFI:

Test Item		Frequency Range	Uncertainty	Note
Output power	:	1GHz-40GHz	$\pm 0.57\text{dB}$	(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-----

