

RF Exposure Evaluation

For

Innovation First, Inc.

VEXnet SERVER

Test Model: 210-8909-000

Prepared for : Innovation First, Inc.
Address : 1519 INT.30 W, Greenville Texas 75402, United States

Prepared by : Guangzhou LCS Compliance Testing Laboratory Ltd.
Address : No.44-1, Qianfeng North Road, Shiqi, Panyu District, Guangzhou,
Guangdong, China
Tel : (+86) 020-39166689
Fax : (+86) 020-39166619
Web : www.LCS-cert.com
Mail : webmaster@LCS-cert.com

Date of receipt of test sample : June 04, 2026
Number of tested samples : 2
Sample No. : C260604002-1, C260604002-2
Serial number : Prototype
Date of Test : June 04, 2026 ~ July 15, 2026
Date of Report : July 16, 2026

RF Exposure Evaluation**Report Reference No. : LCSC06046019EF**

Date of Issue..... : July 16, 2026

Testing Laboratory Name..... : Guangzhou LCS Compliance Testing Laboratory Ltd.Address..... : No.44-1, Qianfeng North Road, Shiqi, Panyu District, Guangzhou,
Guangdong, ChinaTesting Location/ Procedure..... : Full application of Harmonised standards ■
Partial application of Harmonised standards □
Other standard testing method □**Applicant's Name..... : Innovation First, Inc.**

Address..... : 1519 INT.30 W, Greenville Texas 75402, United States

Test SpecificationStandard..... : 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..... : Guangzhou LCS Compliance Testing Laboratory Ltd.

Master TRF..... : Dated 2011-03

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EUT Description..... : VEXnet SERVER

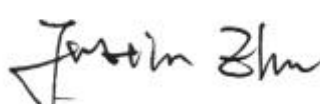
Trade Mark..... : N/A

Test Model..... : 210-8909-000

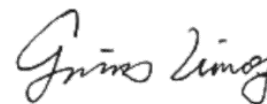
Ratings..... : Please Refer to Page 6

Result : PASS**Compiled by:**

Lifeng Le/ Administrator

Supervised by:

Justin Zhu/ Technique Director

Approved by:

Gavin Liang/ Manager

RF Exposure Evaluation

Test Report No. :	LCSC06046019EF	<u>July 16, 2026</u> Date of issue
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EUT.....	: VEXnet SERVER
Test Model.....	: 210-8909-000
Applicant.....	: Innovation First, Inc.
Address.....	: 1519 INT.30 W, Greenville Texas 75402, United States
Telephone.....	: /
Fax.....	: /
Manufacturer.....	: Innovation First, Inc.
Address.....	: 1519 INT.30 W, Greenville Texas 75402, United States
Telephone.....	: /
Fax.....	: /
Factory.....	: /
Address.....	: /
Telephone.....	: /
Fax.....	: /

Test Result:	PASS
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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	July 16, 2026	Initial Issue	--

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1. Product Information

EUT	: VEXnet SERVER
Test Model	: 210-8909-000
Ratings	: Input: DC 12V by USB-C power adapter
Hardware Version	: /
Software Version	: /
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: FPC Antenna, 2.73dBi(Max.) Ant2: FPC Antenna, 2.73dBi(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) 1 channels for 160MHz bandwidth(5250MHz)
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: FPC Antenna, 3.54dBi(Max.) Ant2: FPC Antenna, 3.54dBi(Max.) Ant3: FPC Antenna, 3.54dBi(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) 1 channels for 160MHz bandwidth(5250MHz)
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: FPC Antenna, 3.54dBi(Max.) Ant2: FPC Antenna, 3.54dBi(Max.) Ant3: FPC Antenna, 3.54dBi(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) 1 channels for 160MHz bandwidth(5570MHz)
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: FPC Antenna, 3.54dBi(Max.) Ant2: FPC Antenna, 3.54dBi(Max.) Ant3: FPC Antenna, 3.54dBi(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: FPC Antenna, 3.54dBi(Max.) Ant2: FPC Antenna, 3.54dBi(Max.) Ant3: FPC Antenna, 3.54dBi(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. Conducted Power

[2.4G WIFI]

Mode	Channel	Frequency (MHz)	Ant1 Max Conducted Power(dBm)	Ant2 Max Conducted Power(dBm)
11B	1	2412	14.34	13.45
	6	2437	14.37	13.32
	11	2462	14.47	12.88
11G	1	2412	13.23	13.15
	6	2437	13.33	13.12
	11	2462	13.33	12.86
11N20 SISO	1	2412	11.49	13.71
	6	2437	12.70	13.67
	11	2462	12.73	13.47
11N40 SISO	3	2422	14.73	14.17
	6	2437	14.84	14.22
	9	2452	14.72	14.04
11AX20 SISO	1	2412	14.57	14.32
	6	2437	14.43	12.96
	11	2462	14.63	11.94
11AX40 SISO	3	2422	14.98	13.36
	6	2437	15.04	13.63
	9	2452	14.76	13.40

[5.2G WIFI]

Mode	Channel	Frequency (MHz)	Ant1 Max Conducted Power(dBm)	Ant2 Max Conducted Power(dBm)	Ant3 Max Conducted Power(dBm)
11A	36	5180	17.32	11.68	13.24
	40	5200	16.86	11.92	13.60
	48	5240	16.79	12.76	14.21
11N20 SISO	36	5180	16.88	12.20	14.59
	40	5200	16.75	12.89	15.24
	48	5240	16.76	14.17	14.69
11N40 SISO	38	5190	16.99	13.43	14.97
	46	5230	16.77	14.18	14.74
11AC20 SISO	36	5180	17.02	13.42	14.93
	40	5200	16.88	13.61	13.57
	48	5240	16.90	14.50	12.47
11AC40 SISO	38	5190	18.12	13.70	12.86
	46	5230	17.78	14.32	13.62
11AC80 SISO	42	5210	17.46	13.53	14.46
11AX20 SISO	36	5180	17.97	13.66	13.74
	40	5200	17.85	13.94	14.33
	48	5240	17.78	14.71	13.49
11AX40 SISO	38	5190	18.26	13.85	13.24
	46	5230	18.11	14.55	13.60
11AX80 SISO	42	5210	17.62	13.73	14.21

[5.3G WIFI]

Mode	Channel	Frequency (MHz)	Ant1 Max Conducted Power(dBm)	Ant2 Max Conducted Power(dBm)	Ant3 Max Conducted Power(dBm)
11A	52	5260	18.25	13.32	13.24
	60	5280	18.27	13.58	13.50
	64	5320	18.32	13.76	13.50
11N20 SISO	52	5260	18.22	13.71	11.68
	60	5280	18.40	13.97	12.00
	64	5320	18.28	14.16	12.90
11N40 SISO	54	5270	18.37	14.96	12.82
	62	5310	18.34	15.32	13.06
11AC20 SISO	52	5260	18.34	13.99	12.97
	60	5280	18.41	14.31	13.37
	64	5320	18.44	14.51	13.44
11AC40 SISO	54	5270	18.33	14.13	13.08
	62	5310	18.50	14.64	13.55
11AC80 SISO	58	5290	18.54	13.88	12.79
11AC160 SISO	50	5250	18.18	14.67	13.91
11AX20 SISO	52	5260	18.33	14.17	13.28
	60	5280	18.35	14.51	13.66
	64	5320	18.48	14.82	13.74
11AX40 SISO	54	5270	18.40	13.40	13.53
	62	5310	18.43	13.88	13.81
11AX80 SISO	58	5290	18.46	13.02	14.06
11AX160 SISO	50	5250	17.02	14.72	12.64

[5.5G WIFI]

Mode	Channel	Frequency (MHz)	Ant1 Max Conducted Power(dBm)	Ant2 Max Conducted Power(dBm)	Ant3 Max Conducted Power(dBm)
11A	100	5500	17.88	13.02	14.02
	116	5580	17.43	12.60	13.64
	140	5700	18.30	18.27	12.62
11N20 SISO	100	5500	17.33	13.55	14.47
	116	5580	16.87	13.08	13.17
	140	5700	16.99	16.78	11.19
11N40 SISO	102	5510	18.44	13.65	13.64
	110	5550	17.21	13.50	13.49
	134	5670	17.34	12.27	14.56
11AC20 SISO	100	5500	17.56	13.81	14.22
	116	5580	17.06	13.35	13.34
	140	5700	16.13	12.38	11.92
11AC40 SISO	102	5510	17.43	13.90	13.78
	110	5550	17.31	13.71	13.62
	134	5670	16.40	12.61	12.16
11AC80 SISO	106	5530	17.92	13.26	13.23
	122	5610	17.20	12.74	12.38
11AC160 SISO	114	5570	16.02	11.31	11.60
11AX20 SISO	100	5500	18.44	14.08	14.34
	116	5580	18.45	12.64	13.03
	140	5700	16.31	12.53	12.00
11AX40 SISO	102	5510	18.46	13.10	13.53
	110	5550	18.42	12.97	13.40
	134	5670	16.67	11.75	12.47
11AX80 SISO	106	5530	18.10	12.24	12.90
	122	5610	17.48	10.50	12.48
11AX160 SISO	114	5570	16.31	10.63	12.22

[5.8G WIFI Max Conducted Power]

Mode	Channel	Frequency (MHz)	Ant1 Max Conducted Power(dBm)	Ant2 Max Conducted Power(dBm)	Ant3 Max Conducted Power(dBm)
11A	149	5745	17.97	13.66	13.03
	157	5785	17.89	13.59	12.93
	165	5825	17.76	13.23	12.67
11N20 SISO	149	5745	17.38	12.05	12.48
	157	5785	17.52	13.11	12.56
	165	5825	17.37	12.84	12.18
11N40 SISO	151	5755	17.57	13.12	12.58
	159	5795	17.45	13.06	12.45
11AC20 SISO	149	5745	16.53	13.30	13.38
	157	5785	17.34	12.91	13.28
	165	5825	17.32	13.07	12.93
11AC40 SISO	151	5755	17.51	12.87	13.26
	159	5795	17.36	12.69	13.19
11AC80 SISO	155	5775	17.01	12.36	12.77
11AX20 SISO	149	5745	13.86	13.81	13.51
	157	5785	14.94	13.76	13.52
	165	5825	14.67	13.47	13.11
11AX40 SISO	151	5755	14.79	13.77	13.62
	159	5795	14.84	13.66	13.50
11AX80 SISO	155	5775	14.51	13.15	13.16

6. Manufacturing Tolerance

[2.4G WIFI Ant1]

11B (Average)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	14.0	14.0	13.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11G (Average)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	13.0	13.0	13.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N20 (Average)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	11.0	12.0	12.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N40 (Average)			
Channel	Channel 3	Channel 6	Channel 9
Target (dBm)	14.0	14.0	14.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AX20 (Average)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	14.0	14.0	14.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AX40 (Average)			
Channel	Channel 3	Channel 6	Channel 9
Target (dBm)	14.0	15.0	14.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0

[2.4G WIFI Ant2]

11B (Average)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	13.0	13.0	12.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11G (Average)			
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 (Average)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	13.0	13.0	13.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N40 (Average)			
Channel	Channel 3	Channel 6	Channel 9
Target (dBm)	14.0	14.0	14.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AX20 (Average)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	14.0	12.0	11.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AX40 (Average)			

Channel	Channel 3	Channel 6	Channel 9
Target (dBm)	13.0	13.0	13.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0

[5.2G WIFI Ant1]

11A(Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	17.0	16.0	16.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N20(Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	16.0	16.0	16.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N40(Average)			
Channel	Channel 38	Channel 46	
Target (dBm)	16.0	16.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC20(Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	17.0	16.0	16.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC40(Average)			
Channel	Channel 38	Channel 46	
Target (dBm)	18.0	17.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC80(Average)			
Channel	Channel 42		
Target (dBm)	17.0		
Tolerance $\pm$ (dB)	1.0		
11AX20(Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	17.0	17.0	17.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AX40(Average)			
Channel	Channel 38	Channel 46	
Target (dBm)	18.0	18.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AX80(Average)			
Channel	Channel 42		
Target (dBm)	17.0		
Tolerance $\pm$ (dB)	1.0		

[5.2G WIFI Ant2]

11A(Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	11.0	11.0	12.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N20(Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	12.0	12.0	14.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N40(Average)			
Channel	Channel 38	Channel 46	
Target (dBm)	13.0	14.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC20(Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	13.0	13.0	14.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC40(Average)			
Channel	Channel 38	Channel 46	
Target (dBm)	13.0	14.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC80(Average)			
Channel	Channel 42		
Target (dBm)	13.0		
Tolerance $\pm$ (dB)	1.0		
11AX20(Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	13.0	13.0	14.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AX40(Average)			
Channel	Channel 38	Channel 46	
Target (dBm)	13.0	14.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AX80(Average)			
Channel	Channel 42		
Target (dBm)	13.0		
Tolerance $\pm$ (dB)	1.0		

[5.2G WIFI Ant3]

11A(Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	13.0	13.0	14.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N20(Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	14.0	15.0	14.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N40(Average)			
Channel	Channel 38	Channel 46	
Target (dBm)	14.0	14.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC20(Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	14.0	13.0	12.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC40(Average)			
Channel	Channel 38	Channel 46	
Target (dBm)	12.0	13.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC80(Average)			
Channel	Channel 42		
Target (dBm)	14.0		
Tolerance $\pm$ (dB)	1.0		
11AX20(Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	13.0	14.0	13.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AX40(Average)			
Channel	Channel 38	Channel 46	
Target (dBm)	13.0	13.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AX80(Average)			
Channel	Channel 42		
Target (dBm)	14.0		
Tolerance $\pm$ (dB)	1.0		

[5.3G WIFI Ant1]

11A (AVG)			
Channel	Channel 52	Channel 60	Channel 64
Target (dBm)	18.0	18.0	18.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N20(AVG)			
Channel	Channel 52	Channel 60	Channel 64
Target (dBm)	18.0	18.0	18.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N40(AVG)			
Channel	Channel 54	Channel 62	
Target (dBm)	18.0	18.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC20(AVG)			
Channel	Channel 52	Channel 60	Channel 64
Target (dBm)	18.0	18.0	18.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC40(AVG)			
Channel	Channel 54	Channel 62	
Target (dBm)	18.0	18.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC80 (Average)			
Channel	Channel 58		
Target (dBm)	18.0		
Tolerance $\pm$ (dB)	1.0		
11AC160 (Average)			
Channel	Channel 50		
Target (dBm)	18.0		
Tolerance $\pm$ (dB)	1.0		
11AX20(AVG)			
Channel	Channel 52	Channel 60	Channel 64
Target (dBm)	18.0	18.0	18.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AX40(AVG)			
Channel	Channel 54	Channel 62	
Target (dBm)	18.0	18.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AX80 (Average)			
Channel	Channel 58		
Target (dBm)	18.0		
Tolerance $\pm$ (dB)	1.0		
11AX160 (Average)			
Channel	Channel 50		
Target (dBm)	17.0		
Tolerance $\pm$ (dB)	1.0		

[5.3G WIFI Ant2]

11A (AVG)			
Channel	Channel 52	Channel 60	Channel 64
Target (dBm)	13.0	13.0	13.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N20(AVG)			
Channel	Channel 52	Channel 60	Channel 64
Target (dBm)	13.0	13.0	14.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N40(AVG)			
Channel	Channel 54	Channel 62	
Target (dBm)	14.0	15.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC20(AVG)			
Channel	Channel 52	Channel 60	Channel 64
Target (dBm)	13.0	14.0	14.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC40(AVG)			
Channel	Channel 54	Channel 62	
Target (dBm)	14.0	14.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC80 (Average)			
Channel	Channel 58		
Target (dBm)	13.0		
Tolerance $\pm$ (dB)	1.0		
11AC160 (Average)			
Channel	Channel 50		
Target (dBm)	14.0		
Tolerance $\pm$ (dB)	1.0		
11AX20(AVG)			
Channel	Channel 52	Channel 60	Channel 64
Target (dBm)	14.0	14.0	14.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AX40(AVG)			
Channel	Channel 54	Channel 62	
Target (dBm)	13.0	13.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AX80 (Average)			
Channel	Channel 58		
Target (dBm)	13.0		
Tolerance $\pm$ (dB)	1.0		
11AX160 (Average)			
Channel	Channel 50		
Target (dBm)	14.0		
Tolerance $\pm$ (dB)	1.0		

[5.3G WIFI Ant3]

11A (AVG)			
Channel	Channel 52	Channel 60	Channel 64
Target (dBm)	13.0	13.0	13.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N20(AVG)			
Channel	Channel 52	Channel 60	Channel 64
Target (dBm)	11.0	12.0	12.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N40(AVG)			
Channel	Channel 54	Channel 62	
Target (dBm)	12.0	13.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC20(AVG)			
Channel	Channel 52	Channel 60	Channel 64
Target (dBm)	12.0	13.0	13.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC40(AVG)			
Channel	Channel 54	Channel 62	
Target (dBm)	13.0	13.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC80 (Average)			
Channel	Channel 58		
Target (dBm)	12.0		
Tolerance $\pm$ (dB)	1.0		
11AC160 (Average)			
Channel	Channel 50		
Target (dBm)	13.0		
Tolerance $\pm$ (dB)	1.0		
11AX20(AVG)			
Channel	Channel 52	Channel 60	Channel 64
Target (dBm)	13.0	13.0	13.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AX40(AVG)			
Channel	Channel 54	Channel 62	
Target (dBm)	13.0	13.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AX80 (Average)			
Channel	Channel 58		
Target (dBm)	14.0		
Tolerance $\pm$ (dB)	1.0		
11AX160 (Average)			
Channel	Channel 50		
Target (dBm)	12.0		
Tolerance $\pm$ (dB)	1.0		

[5.5G WIFI Ant1]

11A (AVG)			
Channel	Channel 100	Channel 116	Channel 140
Target (dBm)	17.0	17.0	18.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N20(AVG)			
Channel	Channel 100	Channel 116	Channel 140
Target (dBm)	17.0	16.0	16.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N40(AVG)			
Channel	Channel 102	Channel 110	Channel 134
Target (dBm)	18.0	17.0	17.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC20(AVG)			
Channel	Channel 100	Channel 116	Channel 140
Target (dBm)	17.0	17.0	16.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC40(AVG)			
Channel	Channel 102	Channel 110	Channel 134
Target (dBm)	17.0	17.0	16.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC80 (Average)			
Channel	Channel 106	Channel 122	
Target (dBm)	17.0	17.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC160 (Average)			
Channel	Channel 114		
Target (dBm)	16.0		
Tolerance $\pm$ (dB)	1.0		
11AX20(AVG)			
Channel	Channel 100	Channel 116	Channel 140
Target (dBm)	18.0	18.0	16.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AX40(AVG)			
Channel	Channel 102	Channel 110	Channel 134
Target (dBm)	18.0	18.0	16.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AX80 (Average)			
Channel	Channel 106	Channel 122	
Target (dBm)	18.0	17.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AX160 (Average)			
Channel	Channel 114		
Target (dBm)	16.0		
Tolerance $\pm$ (dB)	1.0		

[5.5G WIFI Ant2]

11A (AVG)			
Channel	Channel 100	Channel 116	Channel 140
Target (dBm)	13.0	12.0	18.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N20(AVG)			
Channel	Channel 100	Channel 116	Channel 140
Target (dBm)	13.0	13.0	16.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N40(AVG)			
Channel	Channel 102	Channel 110	Channel 134
Target (dBm)	13.0	13.0	12.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC20(AVG)			
Channel	Channel 100	Channel 116	Channel 140
Target (dBm)	13.0	13.0	12.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC40(AVG)			
Channel	Channel 102	Channel 110	Channel 134
Target (dBm)	13.0	13.0	12.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC80 (Average)			
Channel	Channel 106	Channel 122	
Target (dBm)	13.0	12.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC160 (Average)			
Channel	Channel 114		
Target (dBm)	11.0		
Tolerance $\pm$ (dB)	1.0		
11AX20(AVG)			
Channel	Channel 100	Channel 116	Channel 140
Target (dBm)	14.0	12.0	12.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AX40(AVG)			
Channel	Channel 102	Channel 110	Channel 134
Target (dBm)	13.0	12.0	11.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AX80 (Average)			
Channel	Channel 106	Channel 122	
Target (dBm)	12.0	10.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AX160 (Average)			
Channel	Channel 114		
Target (dBm)	10.0		
Tolerance $\pm$ (dB)	1.0		

[5.5G WIFI Ant3]

11A (AVG)			
Channel	Channel 100	Channel 116	Channel 140
Target (dBm)	14.0	13.0	12.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N20(AVG)			
Channel	Channel 100	Channel 116	Channel 140
Target (dBm)	14.0	13.0	11.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N40(AVG)			
Channel	Channel 102	Channel 110	Channel 134
Target (dBm)	13.0	13.0	14.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC20(AVG)			
Channel	Channel 100	Channel 116	Channel 140
Target (dBm)	14.0	13.0	11.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC40(AVG)			
Channel	Channel 102	Channel 110	Channel 134
Target (dBm)	13.0	13.0	12.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC80 (Average)			
Channel	Channel 106	Channel 122	
Target (dBm)	13.0	12.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC160 (Average)			
Channel	Channel 114		
Target (dBm)	11.0		
Tolerance $\pm$ (dB)	1.0		
11AX20(AVG)			
Channel	Channel 100	Channel 116	Channel 140
Target (dBm)	14.0	13.0	12.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AX40(AVG)			
Channel	Channel 102	Channel 110	Channel 134
Target (dBm)	13.0	13.0	12.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AX80 (Average)			
Channel	Channel 106	Channel 122	
Target (dBm)	12.0	12.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AX160 (Average)			
Channel	Channel 114		
Target (dBm)	12.0		
Tolerance $\pm$ (dB)	1.0		

[5.8G WIFI Ant1]

11A (Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	17.0	17.0	17.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N20(Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	17.0	17.0	17.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N40(Average)			
Channel	Channel 151	Channel 159	
Target (dBm)	17.0	17.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC20(Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	16.0	17.0	17.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC40(Average)			
Channel	Channel 151	Channel 159	
Target (dBm)	17.0	17.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC80 (Average)			
Channel	Channel 155		
Target (dBm)	17.0		
Tolerance $\pm$ (dB)	1.0		
11AX20(Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	13.0	14.0	14.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AX40(Average)			
Channel	Channel 151	Channel 159	
Target (dBm)	14.0	14.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AX80 (Average)			
Channel	Channel 155		
Target (dBm)	14.0		
Tolerance $\pm$ (dB)	1.0		

[5.8G WIFI Ant2]

11A (Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	13.0	13.0	13.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N20(Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	12.0	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	13.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC40(Average)			
Channel	Channel 151	Channel 159	
Target (dBm)	12.0	12.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC80 (Average)			
Channel	Channel 155		
Target (dBm)	12.0		
Tolerance $\pm$ (dB)	1.0		
11AX20(Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	13.0	13.0	13.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AX40(Average)			
Channel	Channel 151	Channel 159	
Target (dBm)	13.0	13.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AX80 (Average)			
Channel	Channel 155		
Target (dBm)	13.0		
Tolerance $\pm$ (dB)	1.0		

[5.8G WIFI Ant3]

11A (Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	13.0	12.0	12.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N20(Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	12.0	12.0	12.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N40(Average)			
Channel	Channel 151	Channel 159	
Target (dBm)	12.0	12.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC20(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
11AC40(Average)			
Channel	Channel 151	Channel 159	
Target (dBm)	13.0	13.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC80 (Average)			
Channel	Channel 155		
Target (dBm)	12.0		
Tolerance $\pm$ (dB)	1.0		
11AX20(Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	13.0	13.0	13.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AX40(Average)			
Channel	Channel 151	Channel 159	
Target (dBm)	13.0	13.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AX80 (Average)			
Channel	Channel 155		
Target (dBm)	13.0		
Tolerance $\pm$ (dB)	1.0		

7. Measurement Results

7.1 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.

[2.4G WIFI Ant1]

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm ²)	MPE Limits (mW/cm ²)
	dBm	mW				
IEEE 802.11b	15.0	31.6228	2.73	1.8750	0.0118	1.0000
IEEE 802.11g	14.0	25.1189	2.73	1.8750	0.0094	1.0000
IEEE 802.11n HT20	13.0	19.9526	2.73	1.8750	0.0074	1.0000
IEEE 802.11n HT40	15.0	31.6228	2.73	1.8750	0.0118	1.0000
IEEE 802.11ax HE20	15.0	31.6228	2.73	1.8750	0.0118	1.0000
IEEE 802.11ax HE40	16.0	39.8107	2.73	1.8750	0.0149	1.0000

[2.4G WIFI Ant2]

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm ²)	MPE Limits (mW/cm ²)
	dBm	mW				
IEEE 802.11b	14.0	25.1189	2.73	1.8750	0.0094	1.0000
IEEE 802.11g	14.0	25.1189	2.73	1.8750	0.0094	1.0000
IEEE 802.11n HT20	14.0	25.1189	2.73	1.8750	0.0094	1.0000
IEEE 802.11n HT40	15.0	31.6228	2.73	1.8750	0.0118	1.0000
IEEE 802.11ax HE20	15.0	31.6228	2.73	1.8750	0.0118	1.0000
IEEE 802.11ax HE40	14.0	25.1189	2.73	1.8750	0.0094	1.0000

[5.2G WIFI Ant1]

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm ²)	MPE Limits (mW/cm ²)
	dBm	mW				
IEEE 802.11a	18.0	63.0957	3.54	2.2594	0.0284	1.0000
IEEE 802.11n HT20	17.0	50.1187	3.54	2.2594	0.0225	1.0000
IEEE 802.11n HT40	17.0	50.1187	3.54	2.2594	0.0225	1.0000
IEEE 802.11ac VHT20	18.0	63.0957	3.54	2.2594	0.0284	1.0000
IEEE 802.11ac VHT40	19.0	79.4328	3.54	2.2594	0.0357	1.0000
IEEE 802.11ac VHT80	18.0	63.0957	3.54	2.2594	0.0284	1.0000
IEEE 802.11ax HE20	18.0	63.0957	3.54	2.2594	0.0284	1.0000
IEEE 802.11ax HE40	19.0	79.4328	3.54	2.2594	0.0357	1.0000
IEEE 802.11ax HE80	18.0	63.0957	3.54	2.2594	0.0284	1.0000

[5.2G WIFI Ant2]

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	3.54	2.2594	0.0090	1.0000
IEEE 802.11n HT20	15.0	31.6228	3.54	2.2594	0.0142	1.0000
IEEE 802.11n HT40	15.0	31.6228	3.54	2.2594	0.0142	1.0000
IEEE 802.11ac VHT20	15.0	31.6228	3.54	2.2594	0.0142	1.0000
IEEE 802.11ac VHT40	15.0	31.6228	3.54	2.2594	0.0142	1.0000
IEEE 802.11ac VHT80	14.0	25.1189	3.54	2.2594	0.0113	1.0000
IEEE 802.11ax HE20	15.0	31.6228	3.54	2.2594	0.0142	1.0000
IEEE 802.11ax HE40	15.0	31.6228	3.54	2.2594	0.0142	1.0000
IEEE 802.11ax HE80	14.0	25.1189	3.54	2.2594	0.0113	1.0000

[5.2G WIFI Ant3]

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm ²)	MPE Limits (mW/cm ²)
	dBm	mW				
IEEE 802.11a	15.0	31.6228	3.54	2.2594	0.0142	1.0000
IEEE 802.11n HT20	16.0	39.8107	3.54	2.2594	0.0179	1.0000
IEEE 802.11n HT40	15.0	31.6228	3.54	2.2594	0.0142	1.0000
IEEE 802.11ac VHT20	15.0	31.6228	3.54	2.2594	0.0142	1.0000
IEEE 802.11ac VHT40	14.0	25.1189	3.54	2.2594	0.0113	1.0000
IEEE 802.11ac VHT80	15.0	31.6228	3.54	2.2594	0.0142	1.0000
IEEE 802.11ax HE20	15.0	31.6228	3.54	2.2594	0.0142	1.0000
IEEE 802.11ax HE40	14.0	25.1189	3.54	2.2594	0.0113	1.0000
IEEE 802.11ax HE80	15.0	31.6228	3.54	2.2594	0.0142	1.0000

[5.3G WIFI Ant1]

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm ²)	MPE Limits (mW/cm ²)
	dBm	mW				
IEEE 802.11a	19.0	79.4328	3.54	2.2594	0.0357	1.0000
IEEE 802.11n HT20	19.0	79.4328	3.54	2.2594	0.0357	1.0000
IEEE 802.11n HT40	19.0	79.4328	3.54	2.2594	0.0357	1.0000
IEEE 802.11ac VHT20	19.0	79.4328	3.54	2.2594	0.0357	1.0000
IEEE 802.11ac VHT40	19.0	79.4328	3.54	2.2594	0.0357	1.0000
IEEE 802.11ac VHT80	19.0	79.4328	3.54	2.2594	0.0357	1.0000
IEEE 802.11ac VHT160	19.0	79.4328	3.54	2.2594	0.0357	1.0000
IEEE 802.11ax HE20	19.0	79.4328	3.54	2.2594	0.0357	1.0000
IEEE 802.11ax HE40	19.0	79.4328	3.54	2.2594	0.0357	1.0000
IEEE 802.11ax HE80	19.0	79.4328	3.54	2.2594	0.0357	1.0000
IEEE 802.11ax HE160	18.0	79.4328	3.54	2.2594	0.0357	1.0000

[5.3G WIFI Ant2]

Modulation Type	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	3.54	2.2594	0.0113	1.0000
IEEE 802.11n HT20	15.0	31.6228	3.54	2.2594	0.0142	1.0000
IEEE 802.11n HT40	16.0	39.8107	3.54	2.2594	0.0179	1.0000
IEEE 802.11ac VHT20	15.0	31.6228	3.54	2.2594	0.0142	1.0000
IEEE 802.11ac VHT40	15.0	31.6228	3.54	2.2594	0.0142	1.0000
IEEE 802.11ac VHT80	14.0	25.1189	3.54	2.2594	0.0113	1.0000
IEEE 802.11ac VHT160	15.0	31.6228	3.54	2.2594	0.0142	1.0000
IEEE 802.11ax HE20	15.0	31.6228	3.54	2.2594	0.0142	1.0000
IEEE 802.11ax HE40	14.0	25.1189	3.54	2.2594	0.0113	1.0000
IEEE 802.11ax HE80	14.0	25.1189	3.54	2.2594	0.0113	1.0000
IEEE 802.11ax HE160	15.0	31.6228	3.54	2.2594	0.0142	1.0000

[5.3G WIFI Ant3]

Modulation Type	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	3.54	2.2594	0.0113	1.0000
IEEE 802.11n HT20	13.0	19.9526	3.54	2.2594	0.0090	1.0000
IEEE 802.11n HT40	14.0	25.1189	3.54	2.2594	0.0113	1.0000
IEEE 802.11ac VHT20	14.0	25.1189	3.54	2.2594	0.0113	1.0000
IEEE 802.11ac VHT40	14.0	25.1189	3.54	2.2594	0.0113	1.0000
IEEE 802.11ac VHT80	13.0	19.9526	3.54	2.2594	0.0090	1.0000
IEEE 802.11ac VHT160	14.0	25.1189	3.54	2.2594	0.0113	1.0000
IEEE 802.11ax HE20	14.0	25.1189	3.54	2.2594	0.0113	1.0000
IEEE 802.11ax HE40	14.0	25.1189	3.54	2.2594	0.0113	1.0000
IEEE 802.11ax HE80	15.0	31.6228	3.54	2.2594	0.0142	1.0000
IEEE 802.11ax HE160	13.0	19.9526	3.54	2.2594	0.0090	1.0000

[5.5G WIFI Ant1]

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm2)	MPE Limits (mW/cm2)
	dBm	mW				
IEEE 802.11a	19.0	79.4328	3.54	2.2594	0.0357	1.0000
IEEE 802.11n HT20	18.0	63.0957	3.54	2.2594	0.0284	1.0000
IEEE 802.11n HT40	19.0	79.4328	3.54	2.2594	0.0357	1.0000
IEEE 802.11ac VHT20	18.0	63.0957	3.54	2.2594	0.0284	1.0000
IEEE 802.11ac VHT40	18.0	63.0957	3.54	2.2594	0.0284	1.0000
IEEE 802.11ac VHT80	18.0	63.0957	3.54	2.2594	0.0284	1.0000
IEEE 802.11ac VHT160	17.0	50.1187	3.54	2.2594	0.0225	1.0000
IEEE 802.11ax HE20	19.0	79.4328	3.54	2.2594	0.0357	1.0000
IEEE 802.11ax HE40	19.0	79.4328	3.54	2.2594	0.0357	1.0000
IEEE 802.11ax HE80	19.0	79.4328	3.54	2.2594	0.0357	1.0000
IEEE 802.11ax HE160	17.0	50.1187	3.54	2.2594	0.0225	1.0000

[5.5G WIFI Ant2]

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm2)	MPE Limits (mW/cm2)
	dBm	mW				
IEEE 802.11a	19.0	79.4328	3.54	2.2594	0.0357	1.0000
IEEE 802.11n HT20	17.0	50.1187	3.54	2.2594	0.0225	1.0000
IEEE 802.11n HT40	14.0	25.1189	3.54	2.2594	0.0113	1.0000
IEEE 802.11ac VHT20	14.0	25.1189	3.54	2.2594	0.0113	1.0000
IEEE 802.11ac VHT40	14.0	25.1189	3.54	2.2594	0.0113	1.0000
IEEE 802.11ac VHT80	14.0	25.1189	3.54	2.2594	0.0113	1.0000
IEEE 802.11ac VHT160	12.0	15.8489	3.54	2.2594	0.0071	1.0000
IEEE 802.11ax HE20	15.0	31.6228	3.54	2.2594	0.0142	1.0000
IEEE 802.11ax HE40	14.0	25.1189	3.54	2.2594	0.0113	1.0000
IEEE 802.11ax HE80	13.0	19.9526	3.54	2.2594	0.0090	1.0000
IEEE 802.11ax HE160	11.0	12.5893	3.54	2.2594	0.0057	1.0000

[5.5G WIFI Ant3]

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm2)	MPE Limits (mW/cm2)
	dBm	mW				
IEEE 802.11a	15.0	31.6228	3.54	2.2594	0.0142	1.0000
IEEE 802.11n HT20	15.0	31.6228	3.54	2.2594	0.0142	1.0000
IEEE 802.11n HT40	15.0	31.6228	3.54	2.2594	0.0142	1.0000
IEEE 802.11ac VHT20	15.0	31.6228	3.54	2.2594	0.0142	1.0000
IEEE 802.11ac VHT40	14.0	25.1189	3.54	2.2594	0.0113	1.0000
IEEE 802.11ac VHT80	14.0	25.1189	3.54	2.2594	0.0113	1.0000
IEEE 802.11ac VHT160	12.0	15.8489	3.54	2.2594	0.0071	1.0000
IEEE 802.11ax HE20	15.0	31.6228	3.54	2.2594	0.0142	1.0000
IEEE 802.11ax HE40	14.0	25.1189	3.54	2.2594	0.0113	1.0000
IEEE 802.11ax HE80	13.0	19.9526	3.54	2.2594	0.0090	1.0000
IEEE 802.11ax HE160	13.0	19.9526	3.54	2.2594	0.0090	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	18.0	63.0957	3.54	2.2594	0.0284	1.0000
IEEE 802.11n HT20	18.0	63.0957	3.54	2.2594	0.0284	1.0000
IEEE 802.11n HT40	18.0	63.0957	3.54	2.2594	0.0284	1.0000
IEEE 802.11ac VHT20	18.0	63.0957	3.54	2.2594	0.0284	1.0000
IEEE 802.11ac VHT40	18.0	63.0957	3.54	2.2594	0.0284	1.0000
IEEE 802.11ac VHT80	18.0	63.0957	3.54	2.2594	0.0284	1.0000
IEEE 802.11ax HE20	15.0	31.6228	3.54	2.2594	0.0142	1.0000
IEEE 802.11ax HE40	15.0	31.6228	3.54	2.2594	0.0142	1.0000
IEEE 802.11ax HE80	15.0	31.6228	3.54	2.2594	0.0142	1.0000

[5.8G WIFI Ant2]

Modulation Type	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	3.54	2.2594	0.0113	1.0000
IEEE 802.11n HT20	14.0	25.1189	3.54	2.2594	0.0113	1.0000
IEEE 802.11n HT40	14.0	25.1189	3.54	2.2594	0.0113	1.0000
IEEE 802.11ac VHT20	14.0	25.1189	3.54	2.2594	0.0113	1.0000
IEEE 802.11ac VHT40	13.0	19.9526	3.54	2.2594	0.0090	1.0000
IEEE 802.11ac VHT80	13.0	19.9526	3.54	2.2594	0.0090	1.0000
IEEE 802.11ax HE20	14.0	25.1189	3.54	2.2594	0.0113	1.0000
IEEE 802.11ax HE40	14.0	25.1189	3.54	2.2594	0.0113	1.0000
IEEE 802.11ax HE80	14.0	25.1189	3.54	2.2594	0.0113	1.0000

[5.8G WIFI Ant3]

Modulation Type	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	3.54	2.2594	0.0113	1.0000
IEEE 802.11n HT20	13.0	19.9526	3.54	2.2594	0.0090	1.0000
IEEE 802.11n HT40	13.0	19.9526	3.54	2.2594	0.0090	1.0000
IEEE 802.11ac VHT20	14.0	25.1189	3.54	2.2594	0.0113	1.0000
IEEE 802.11ac VHT40	14.0	25.1189	3.54	2.2594	0.0113	1.0000
IEEE 802.11ac VHT80	13.0	19.9526	3.54	2.2594	0.0090	1.0000
IEEE 802.11ax HE20	14.0	25.1189	3.54	2.2594	0.0113	1.0000
IEEE 802.11ax HE40	14.0	25.1189	3.54	2.2594	0.0113	1.0000
IEEE 802.11ax HE80	14.0	25.1189	3.54	2.2594	0.0113	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 2.4GWLAN&5.2GWLAN&5.3GWLAN &5.5GWLAN &5.8GWLAN, another one 2.4GWLAN&5.2GWLAN&5.3GWLAN &5.5GWLAN &5.8GWLAN, one 5.2GWLAN&5.3GWLAN &5.5GWLAN &5.8GWLAN, so need consider simultaneous transmission;

Simultaneous transmission MPE

According to KDB447498 for Transmitters used in mobile exposure conditions for simultaneous transmission operations;

$\sum$ of MPE ratios ≤ 1.0

<the worst simultaneous transmission operations result-2.4GWIFI>

2.4GWIFI-Ant1	2.4GWIFI-Ant2	$\sum$ MPE ratios	Limit	Results
0.0149	0.0118	0.0267	1.0	Pass

<the worst simultaneous transmission operations result-5GWIFI>

5GWIFI-Ant1	5GWIFI-Ant2	5GWIFI-Ant3	$\sum$ MPE ratios	Limit	Results
0.0357	0.0357	0.0142	0.0856	1.0	Pass

Remark:

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

8. Conclusion

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

9. Description of Test Facility

Site Description

EMC Lab.

: CNAS Registration Number is L11555
A2LA Certificate Number: 5099.01
FCC Designation Number is CN1379
Test Firm Registration Number: 729882

10. Measurement Uncertainty

2.4GWIFI/5.2GWIFI/5.3GWIFI/5.5GWIFI/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.

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