



RF Exposure Evaluation

For

Hyphametrics, INC.

Media Measurement Gateway

Test Model: CMF04

Prepared for : Hyphametrics, INC.
Address : 149 E 23 Street 2052, New York, NY 10010, United States

Prepared by : Shenzhen LCS Compliance Testing Laboratory Ltd.
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Date of receipt of test sample : June 05, 2026
Number of tested samples : 2
Sample No. : A260530029-1, A260530029-2
Serial number : Prototype
Date of Test : June 05, 2026 ~ June 30, 2026
Date of Report : July 01, 2026





RF Exposure Evaluation	
Report Reference No.	LCSA06116001EF
Date of Issue	July 01, 2026
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	Hyphametrics, INC.
Address	149 E 23 Street 2052, New York, NY 10010, United States
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	coreMeter
Test Model	CMF04
Ratings	Please Refer to Page 6
Result	Pass

Compiled by:

Martin Lee/ Administrator

Supervised by:

Kevin Huang/ RF Manager

Approved by:

Gavin Liang/ Manager





RF Exposure Evaluation

Test Report No. : LCSA06116001EF	<u>July 01, 2026</u> Date of issue
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EUT.....	: Media Measurement Gateway
Test Model.....	: CMF04
Applicant.....	: Hyphametrics, INC.
Address.....	: 149 E 23 Street 2052, New York, NY 10010, United States
Telephone.....	: /
Fax.....	: /
Manufacturer.....	: Shenzhen Geniatech Inc., Ltd.
Address.....	: Room 02-04, 10 / F, Block A, Building 8, Shenzhen International Innovation Valley, Dashi Road, Nanshan District, Shenzhen, Guangdong, China.
Telephone.....	: /
Fax.....	: /
Factory.....	: Shenzhen Geniatech Inc., Ltd.
Address.....	: 2F~3F, Block A, Yinghaosheng Industrial Park, Fu'an Road, Dayang Development Zone, Funyong Town, Bao'an District, Shenzhen, China.
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 01, 2026	Initial Issue	---





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1. Product Information

EUT	: Media Measurement Gateway
Test Model	: CMF04
Ratings	: Input: 12.0V $\pm$ 3.0A For Adapter Input:100-240V~, 50/60Hz, 1.2A MAX Output:12.0V $\pm$ 3.0A
Hardware Version	: V2.0
Software Version	: V2.0
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)
Antenna Description	: Ant1: External Antenna, 3.02dBi(max.) Ant2: External Antenna, 3.02dBi(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)
Antenna Description	: Ant1: External Antenna, 3.27dBi(max.) Ant2: External Antenna, 3.27dBi(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: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ac: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK)
Antenna Description	: Ant1: External Antenna, 3.27dBi(max.) Ant2: External Antenna, 3.27dBi(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: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ac: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK)
Antenna Description	: Ant1: External Antenna, 3.27dBi(max.) Ant2: External Antenna, 3.27dBi(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)

Antenna Description : Ant1: External Antenna, 3.27dBi(max.)
Ant2: External Antenna, 3.27dBi(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
External	External Antenna 1	2400MHz ~ 2500MHz 5000MHz ~ 6000MHz	2.4GWIFI: 3.02dBi 5GWIFI: 3.27dBi	WIFI Antenna
	External Antenna 2	2400MHz ~ 2500MHz 5000MHz ~ 6000MHz	2.4GWIFI: 3.02dBi 5GWIFI: 3.27dBi	WIFI Antenna

6. Conducted Power

[2.4G WIFI]

Mode	Channel	Frequency (MHz)	Ant 1 Max Conducted Power(dBm)	Ant 2 Max Conducted Power(dBm)
11B	1	2412	14.13	14.46
	6	2437	12.81	14.44
	11	2462	14.2	13.93
11G	1	2412	13.27	13.62
	6	2437	12.22	13.59
	11	2462	13.15	13.27
11N20 SISO	1	2412	14.0	13.15
	6	2437	12.97	12.92
	11	2462	13.73	12.82
11N40 SISO	3	2422	13.47	13.10
	6	2437	13.79	12.20
	9	2452	13.85	13.03

[5.2G WIFI]

Mode	Channel	Frequency (MHz)	Ant 1 Max Conducted Power(dBm)	Ant 2 Max Conducted Power(dBm)
11A	36	5180	15.81	16.15
	40	5200	15.52	16.25
	48	5240	15.95	16.32
11N20 SISO	36	5180	15.27	15.38
	40	5200	15.19	15.22
	48	5240	15.45	15.59
11N40 SISO	38	5190	14.48	14.51





	46	5230	14.57	14.7
11AC20 SISO	36	5180	15.36	15.2
	40	5200	15.17	15.22
	48	5240	15.45	15.42
11AC40 SISO	38	5190	14.49	14.56
	46	5230	14.58	14.68
11AC80 SISO	42	5210	13.76	14.19

[5.3G WIFI]

Mode	Channel	Frequency (MHz)	Ant 1 Max Conducted Power(dBm)	Ant 2 Max Conducted Power(dBm)
IEEE 802.11a	52	5260	16.82	16.77
	60	5280	16.02	17.34
	64	5320	15.56	16.56
IEEE 802.11n HT20	52	5260	15.8	15.61
	60	5280	15.88	16.15
	64	5320	15.41	16.21
IEEE 802.11n HT40	54	5270	15.08	14.84
	62	5310	13.08	12.5
IEEE 802.11ac VHT20	52	5260	15.85	15.95
	60	5280	15.94	15.77
	64	5320	15.93	15.55
IEEE 802.11ac VHT40	54	5270	14.99	14.61
	62	5310	13.8	13.75
IEEE 802.11ac VHT80	58	5290	14.28	14.43

[5.5G WIFI]

Mode	Channel	Frequency (MHz)	Ant 1 Max Conducted Power(dBm)	Ant 2 Max Conducted Power(dBm)
11A	100	5500	16.55	16.81
	116	5580	15.55	15.38
	140	5700	14.55	15.02
11N20 SISO	100	5500	14.93	15.41
	116	5580	13.33	18.73
	140	5700	13.11	14.01
11N40 SISO	102	5510	13.37	12.65
	110	5550	13.48	14.92
	134	5670	15.38	15.26
11AC20 SISO	100	5500	14.29	16.33
	116	5580	14.19	15.09
	140	5700	13.7	14.42
11AC40 SISO	102	5510	13.48	14.52
	110	5550	13.83	15.25
	134	5670	14.06	15.2
11AC80 SISO	106	5530	14.04	15.11
	122	5610	14.26	15.13





[5.8G WIFI]

Mode	Channel	Frequency (MHz)	Ant 1 Max Conducted Power(dBm)	Ant 2 Max Conducted Power(dBm)
11A	149	5745	17.24	16.5
	157	5785	16.97	16.32
	165	5825	16.56	16.84
11N20 SISO	149	5745	15.89	15.32
	157	5785	16.03	15.89
	165	5825	15.49	16.05
11N40 SISO	151	5755	15.39	14.96
	159	5795	14.92	14.91
11AC20 SISO	149	5745	15.78	15.93
	157	5785	16.01	15.67
	165	5825	15.6	15.8
11AC40 SISO	151	5755	15.18	14.77
	159	5795	14.81	15.05
11AC80 SISO	155	5775	14.58	14.68

7. Manufacturing Tolerance

[2.4G WIFI Ant1]

11B (Average)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	14.0	12.0	14.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11G (Average)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	13.0	12.0	13.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N20 (Average)			
Channel	Channel 1	Channel 6	Channel 11
Target (dBm)	14.0	12.0	13.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N40 (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





[2.4G WIFI Ant2]

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)	13.0	12.0	12.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N40 (Average)			
Channel	Channel 3	Channel 6	Channel 9
Target (dBm)	13.0	12.0	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)	15.0	15.0	15.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N20 (Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	15.0	15.0	15.0
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)	15.0	15.0	15.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC40 (Average)			
Channel	Channel 38	Channel 46	
Target (dBm)	14.0	14.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC80 (Average)			
Channel	Channel 42		
Target (dBm)	13.0		
Tolerance $\pm$ (dB)	1.0		





5.2G WIFI Ant2]

11A (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
11N20 (Average)			
Channel	Channel 36	Channel 40	Channel 48
Target (dBm)	15.0	15.0	15.0
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)	15.0	15.0	15.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC40 (Average)			
Channel	Channel 38	Channel 46	
Target (dBm)	14.0	14.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC80 (Average)			
Channel	Channel 42		
Target (dBm)	14.0		
Tolerance $\pm$ (dB)	1.0		

[5.3G WIFI Ant1]

11A (Average)			
Channel	Channel 52	Channel 60	Channel 64
Target (dBm)	16.0	16.0	15.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N HT20 (Average)			
Channel	Channel 52	Channel 60	Channel 64
Target (dBm)	15.0	15.0	15.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N HT40 (Average)			
Channel	Channel 54	Channel 62	
Target (dBm)	15.0	13.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC VHT20 (Average)			
Channel	Channel 52	Channel 60	Channel 64
Target (dBm)	15.0	15.0	15.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC VHT40 (Average)			
Channel	Channel 54	Channel 62	
Target (dBm)	14.0	13.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC VHT80 (Average)			





Channel	Channel 58
Target (dBm)	14.0
Tolerance $\pm$ (dB)	1.0

[5.3G WIFI Ant2]

11A (Average)			
Channel	Channel 52	Channel 60	Channel 64
Target (dBm)	16.0	17.0	16.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N HT20 (Average)			
Channel	Channel 52	Channel 60	Channel 64
Target (dBm)	15.0	16.0	16.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N HT40 (Average)			
Channel	Channel 54	Channel 62	
Target (dBm)	14.0	12.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC VHT20 (Average)			
Channel	Channel 52	Channel 60	Channel 64
Target (dBm)	15.0	15.0	15.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC VHT40 (Average)			
Channel	Channel 54	Channel 62	
Target (dBm)	14.0	13.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC VHT80 (Average)			
Channel	Channel 58		
Target (dBm)	14.0		
Tolerance $\pm$ (dB)	1.0		

[5.5G WIFI Ant1]

11A (Average)			
Channel	Channel 100	Channel 116	Channel 140
Target (dBm)	16.0	15.0	14.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N HT20 (Average)			
Channel	Channel 100	Channel 116	Channel 140
Target (dBm)	14.0	13.0	13.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N HT40 (Average)			
Channel	Channel 102	Channel 110	Channel 134
Target (dBm)	13.0	13.0	15.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC VHT20 (Average)			
Channel	Channel 100	Channel 116	Channel 140
Target (dBm)	14.0	14.0	13.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC HT40 (Average)			





Channel	Channel 102	Channel 110	Channel 134
Target (dBm)	13.0	13.0	14.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC VHT80 (Average)			
Channel	Channel 106	Channel 122	
Target (dBm)	14.0	14.0	
Tolerance $\pm$ (dB)	1.0	1.0	

[5.5G WIFI Ant2]

11A (Average)			
Channel	Channel 100	Channel 116	Channel 140
Target (dBm)	16.0	15.0	15.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N HT20 (Average)			
Channel	Channel 100	Channel 116	Channel 140
Target (dBm)	15.0	18.0	14.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N HT40 (Average)			
Channel	Channel 102	Channel 110	Channel 134
Target (dBm)	12.0	14.0	15.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC VHT20 (Average)			
Channel	Channel 100	Channel 116	Channel 140
Target (dBm)	16.0	15.0	14.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC HT40 (Average)			
Channel	Channel 102	Channel 110	Channel 134
Target (dBm)	14.0	15.0	15.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11AC VHT80 (Average)			
Channel	Channel 106	Channel 122	
Target (dBm)	15.0	15.0	
Tolerance $\pm$ (dB)	1.0	1.0	

[5.8G WIFI Ant1]

11A (Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	17.0	16.0	16.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N20 (Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	15.0	16.0	15.0
Tolerance $\pm$ (dB)	1.0	1.0	1.0
11N40 (Average)			
Channel	Channel 151	Channel 159	
Target (dBm)	15.0	14.0	
Tolerance $\pm$ (dB)	1.0	1.0	
11AC20 (Average)			
Channel	Channel 149	Channel 157	Channel 165





Target (dBm)	15.0	16.0	15.0
Tolerance ±(dB)	1.0	1.0	1.0
11AC40 (Average)			
Channel	Channe151		Channel 159
Target (dBm)	15.0		14.0
Tolerance ±(dB)	1.0		1.0
11AC80 (Average)			
Channel	Channel 155		
Target (dBm)	14.0		
Tolerance ±(dB)	1.0		

[5.8G WIFI Ant2]

11A (Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	16.0	16.0	16.0
Tolerance ±(dB)	1.0	1.0	1.0
11N20 (Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	15.0	15.0	16.0
Tolerance ±(dB)	1.0	1.0	1.0
11N40 (Average)			
Channel	Channel 151	Channel 159	
Target (dBm)	14.0	14.0	
Tolerance ±(dB)	1.0	1.0	
11AC20 (Average)			
Channel	Channel 149	Channel 157	Channel 165
Target (dBm)	15.0	15.0	15.0
Tolerance ±(dB)	1.0	1.0	1.0
11AC40 (Average)			
Channel	Channel 151	Channel 159	
Target (dBm)	14.0	15.0	
Tolerance ±(dB)	1.0	1.0	
11AC80 (Average)			
Channel	Channel 155		
Target (dBm)	14.0		
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, $r=20\text{cm}$, 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	3.02	2.0045	0.0126	1.0000
IEEE 802.11g	14.0	25.1189	3.02	2.0045	0.0100	1.0000
IEEE 802.11n HT20	14.0	25.1189	3.02	2.0045	0.0100	1.0000
IEEE 802.11n HT40	14.0	25.1189	3.02	2.0045	0.0100	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	15.0	31.6228	3.02	2.0045	0.0126	1.0000
IEEE 802.11g	14.0	25.1189	3.02	2.0045	0.0100	1.0000
IEEE 802.11n HT20	14.0	25.1189	3.02	2.0045	0.0100	1.0000
IEEE 802.11n HT40	14.0	25.1189	3.02	2.0045	0.0100	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	16.0	39.8107	3.27	2.1231	0.0168	1.0000
IEEE 802.11n HT20	16.0	39.8107	3.27	2.1231	0.0168	1.0000
IEEE 802.11n HT40	15.0	31.6228	3.27	2.1231	0.0134	1.0000
IEEE 802.11ac VHT20	16.0	39.8107	3.27	2.1231	0.0168	1.0000
IEEE 802.11ac VHT40	15.0	31.6228	3.27	2.1231	0.0134	1.0000
IEEE 802.11ac VHT80	14.0	25.1189	3.27	2.1231	0.0106	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	17.0	50.1187	3.27	2.1231	0.0212	1.0000
IEEE 802.11n HT20	16.0	39.8107	3.27	2.1231	0.0168	1.0000
IEEE 802.11n HT40	15.0	31.6228	3.27	2.1231	0.0134	1.0000
IEEE 802.11ac VHT20	16.0	39.8107	3.27	2.1231	0.0168	1.0000
IEEE 802.11ac VHT40	15.0	31.6228	3.27	2.1231	0.0134	1.0000
IEEE 802.11ac VHT80	15.0	31.6228	3.27	2.1231	0.0134	1.0000





[5.3G WIFI Ant1]

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	17.0	50.1187	3.27	2.1231	0.0212	1.0000
IEEE 802.11n HT20	16.0	39.8107	3.27	2.1231	0.0168	1.0000
IEEE 802.11n HT40	16.0	39.8107	3.27	2.1231	0.0168	1.0000
IEEE 802.11ac VHT20	16.0	39.8107	3.27	2.1231	0.0168	1.0000
IEEE 802.11ac VHT40	15.0	31.6228	3.27	2.1231	0.0134	1.0000
IEEE 802.11ac VHT80	15.0	31.6228	3.27	2.1231	0.0134	1.0000

[5.3G WIFI Ant2]

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	18.0	63.0957	3.27	2.1231	0.0267	1.0000
IEEE 802.11n HT20	17.0	50.1187	3.27	2.1231	0.0212	1.0000
IEEE 802.11n HT40	15.0	31.6228	3.27	2.1231	0.0134	1.0000
IEEE 802.11ac VHT20	16.0	39.8107	3.27	2.1231	0.0168	1.0000
IEEE 802.11ac VHT40	15.0	31.6228	3.27	2.1231	0.0134	1.0000
IEEE 802.11ac VHT80	15.0	31.6228	3.27	2.1231	0.0134	1.0000

[5.5G WIFI Ant1]

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	17.0	50.1187	3.27	2.1231	0.0212	1.0000
IEEE 802.11n HT20	15.0	31.6228	3.27	2.1231	0.0134	1.0000
IEEE 802.11n HT40	16.0	39.8107	3.27	2.1231	0.0168	1.0000
IEEE 802.11ac VHT20	15.0	31.6228	3.27	2.1231	0.0134	1.0000
IEEE 802.11ac VHT40	15.0	31.6228	3.27	2.1231	0.0134	1.0000
IEEE 802.11ac VHT80	15.0	31.6228	3.27	2.1231	0.0134	1.0000

[5.5G WIFI Ant2]

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	17.0	50.1187	3.27	2.1231	0.0212	1.0000
IEEE 802.11n HT20	19.0	79.4328	3.27	2.1231	0.0336	1.0000
IEEE 802.11n HT40	16.0	39.8107	3.27	2.1231	0.0168	1.0000
IEEE 802.11ac VHT20	17.0	50.1187	3.27	2.1231	0.0212	1.0000
IEEE 802.11ac VHT40	16.0	39.8107	3.27	2.1231	0.0168	1.0000
IEEE 802.11ac VHT80	16.0	39.8107	3.27	2.1231	0.0168	1.0000





[5.8G 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	3.27	2.1231	0.0267	1.0000
IEEE 802.11n HT20	17.0	50.1187	3.27	2.1231	0.0212	1.0000
IEEE 802.11n HT40	16.0	39.8107	3.27	2.1231	0.0168	1.0000
IEEE 802.11ac VHT20	17.0	50.1187	3.27	2.1231	0.0212	1.0000
IEEE 802.11ac VHT40	16.0	39.8107	3.27	2.1231	0.0168	1.0000
IEEE 802.11ac VHT80	15.0	31.6228	3.27	2.1231	0.0134	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	17.0	50.1187	3.27	2.1231	0.0212	1.0000
IEEE 802.11n HT20	17.0	50.1187	3.27	2.1231	0.0212	1.0000
IEEE 802.11n HT40	15.0	31.6228	3.27	2.1231	0.0134	1.0000
IEEE 802.11ac VHT20	16.0	39.8107	3.27	2.1231	0.0168	1.0000
IEEE 802.11ac VHT40	16.0	39.8107	3.27	2.1231	0.0168	1.0000
IEEE 802.11ac VHT80	15.0	31.6228	3.27	2.1231	0.0134	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 contains two WLAN modular and each WLAN modular have 2 antennas, 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

Modular Model: MT7621A

<the worst simultaneous transmission operations result-2.4GWIFI>

2.4GWIFI-Ant 1	2.4GWIFI-Ant 2	$\sum$ MPE ratios	Limit	Results
0.0100	0.0100	0.0200	1.0	Pass

<the worst simultaneous transmission operations result- 5GWIFI>

5GWIFI-Ant 1	5GWIFI-Ant 2	$\sum$ MPE ratios	Limit	Results
0.0212	0.0336	0.0548	1.0	Pass

Modular Model: AP6275S (Contains FCC ID: ZQA-AP6275S), MPE Test Report No.: FA412214, the maximum MPE ratios was 0.0662;

<the worst simultaneous transmission operations result- Model: MT7621A + Modular: AP6275S >

MT7621A	AP6275S	$\sum$ MPE ratios	Limit	Results
0.0548	0.0662	0.1210	1.0	Pass

Remark:

1. Output power including tune-up tolerance;





2. WIFI output power is burst average power;
3. MPE evaluate distance is 20cm from user manual provide by manufacturer;
4. $MPE\ values = PG/4\pi R^2$
5. Both Bluetooth and WIFI cannot be transmitter simultaneously.
6. Both 2.4GWIFI and 5GWIFI cannot be transmitter simultaneously.
7. WLAN Model: MT7621A + Modular: AP6275S can support 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

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-----

