



# **FCC** Radio Test Report

# FCC ID: RWO-RZ090368QCNFA

This report concerns: Class II Permissive Changes

BTL-FCCP-6-2212C001 Report No.

Equipment Notebook PC **Model Name** RZ09-0482 **Brand Name RAZER** Applicant : Razer Inc.

Address : 9 Pasteur, Suite 100, Irvine, CA92618, USA.

Manufacturer : Razer Inc.

Address : 9 Pasteur, Suite 100, Irvine, CA92618, USA.

**Radio Function** : RLAN 5 GHz (U-NII 4)

: FCC CFR Title 47, Part 15, Subpart E (15.407) FCC Rule Part(s)

Measurement : ANSI C63.10-2013

Procedure(s)

Date of Receipt : 2022/12/19

Date of Test : 2022/12/19 ~ 2023/2/3

**Issued Date** : 2023/4/24

The above equipment has been tested and found in compliance with the requirement of the above standards by BTL Inc.

Prepared by Eric Lee, Engineer

Approved by 0659

BTL Inc.

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### **Declaration**

**BTL** represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

**BTL**'s reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **BTL** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **BTL** issued reports.

This report is the confidential property of the client. As a mutual protection to the clients, the public and ourselves, the test report shall not be reproduced, except in full, without our written approval.

**BTL**'s laboratory quality assurance procedures are in compliance with the **ISO/IEC 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

BTL is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

### Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.

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# **REVISION HISTORY**

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-6-2212C001	R00	Original Report.	2023/2/10	Invalid
BTL-FCCP-6-2212C001	R01	Revised report to address TCB's	2023/4/24	Valid
		comments.		

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### 1 SUMMARY OF TEST RESULTS

Test procedures according to the technical standards.

Standard(s) Section	Description	Test Result	Judgement	Remark
15.207	AC Power Line Conducted Emissions	APPENDIX A	Pass	
15.205 15.209 15.407(b)	Radiated Emissions	APPENDIX B APPENDIX C	Pass	
15.407(e)	6 dB Bandwidth		Pass	
15.407(a)	Maximum E.I.R.P.	APPENDIX D	Pass	
15.407(a)	Power Spectral Density		Pass	
15.203	Antenna Requirement		Pass	
15.407(c)	Automatically Discontinue Transmission		Pass	NOTE (3)

### NOTE:

- (1) "N/A" denotes test is not applicable in this Test Report.
- (2) The report format version is TP.1.1.1.
- (3) The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.
- (4) The antenna gain of EUT is smaller than that of the module. So in this report the worst cases of radiated spurious emissions and AC Power Line Conducted Emissions were evaluated and recorded. And evaluated the output power items and recorded in the report. For the test results of all other test items please refer to module test reports.

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# 1.1 TEST FACILITY

The test locations stated below are under the TAF Accreditation Number 0659. The test location(s) used to collect the test data in this report are:

No. 68-1, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan

(FCC DN: TW0659)

□ CB08

□ CB11

⊠ SR10

SR11

No. 72, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan

(FCC DN: TW0659)

□ C06

□ CB22

### 1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement  $\mathbf{y} \pm \mathbf{U}$ , where expanded uncertainty  $\mathbf{U}$  is based on a standard uncertainty multiplied by a coverage factor of  $\mathbf{k} = \mathbf{2}$ , providing a level of confidence of approximately  $\mathbf{95}$  %. The measurement instrumentation uncertainty considerations contained in CISPR 16-4-2. The BTL measurement uncertainty is less than the CISPR 16-4-2  $\mathbf{U}_{cispr}$  requirement.

A. AC power line conducted emissions test:

Test Site	Method	Measurement Frequency Range	U (dB)
C05	CISPR	150 kHz ~ 30MHz	3.44

### B. Radiated emissions test:

Test Site	Measurement Frequency Range	U (dB)			
	0.03 GHz ~ 0.2 GHz	4.17			
CB21	0.2 GHz ~ 1 GHz	4.72			
	1 GHz ~ 6 GHz	5.21			
	6 GHz ~ 18 GHz	5.51			
	18 GHz ~ 26 GHz	3.69			
	26 GHz ~ 40 GHz	4.23			

### C. Conducted test:

<u> </u>		
	Test Item	U,(dB)
Output power		0.3669

### NOTE:

Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

### 1.3 TEST ENVIRONMENT CONDITIONS

Test Item	Environment Condition	Test Voltage	Tested by
AC Power Line Conducted Emissions	21°C, 65%	AC 120V/60Hz	Paul Shen
Radiated emissions below 1 GHz	23°C, 59%	AC 120V/60Hz	Mark Wang
Radiated emissions above 1 GHz	23°C, 59%	AC 120V/60Hz	Mark Wang
Maximum E.I.R.P.	22.2°C, 56%	AC 120V/60Hz	Tim Lee

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# 1.4 TABLE OF PARAMETERS OF TEST SOFTWARE SETTING

Test Software	QRCT V4.0					
Mode	5845 MHz	5865 MHz	5885 MHz	Data Rate		
IEEE 802.11a	13	13	12.5	6 Mbps		
IEEE 802.11ac (VHT20)	13.5	13.5	13	MCS 0		
IEEE 802.11ax (HE20)	13.5	13.5	13	MCS 0		
Mode	5835 MHz	5875 MHz		Data Rate		
IEEE 802.11ac (VHT40)	15.5	16		MCS 0		
IEEE 802.11ax (HE40)	16	16.5		MCS 0		
Mode	5855 MHz			Data Rate		
IEEE 802.11ac (VHT80)	15			MCS 0		
IEEE 802.11ax (HE80)	15.5			MCS 0		
Mode	5815 MHz			Data Rate		
IEEE 802.11ac (VHT160)	14			MCS 0		
IEEE 802.11ax (HE160)	14			MCS 0		

# 2 GENERAL INFORMATION

# 2.1 DESCRIPTION OF EUT

Equipment	Notebook PC
Model Name	RZ09-0482
Brand Name	RAZER
Model Difference	N/A
	#1 DC voltage supplied from AC adapter.
Power Source	#2 Supplied from battery.
	Model: RC30-0482
	#1 I/P: 100-240V~3.6A 50/60Hz
Power Rating	O/P: 19.5V===11.8A
	#2 DC 15.4V, 4422mAh, 68.1Wh
Products Covered	1* POWER Adapter: RC30-024801
Operation Band	5850 MHz to 5895 MHz
Operation Frequency	5845 MHz to 5885 MHz
Modulation Technology	IEEE 802.11a/n/ac: OFDM
Wiodulation rechilology	IEEE 802.11ax: OFDMA
	IEEE 802.11a: 54/48/36/24/18/12/9/6 Mbps
Transfer Rate	IEEE 802.11n: up to 300 Mbps
Transfer reace	IEEE 802.11ac: up to 1733.4 Mbps
	IEEE 802.11ax: up to 2402 Mbps
	IEEE 802.11a: 19.50 dBm (0.0379W)
	IEEE 802.11ac (VHT20): 19.66 dBm (0.0925 W)
	IEEE 802.11ac (VHT40): 21.89 dBm (0.1544 W)
M 5100	IEEE 802.11ac (VHT80): 21.10 dBm (0.1289 W)
Maximum E.I.R.P.	IEEE 802.11ac (VHT160): 20.07 dBm (0.1015 W)
	IEEE 802.11ax (HE20): 19.94 dBm (0.0985 W)
	IEEE 802.11ax (HE40): 21.80 dBm (0.1512 W)
	IEEE 802.11ax (HE80): 21.21 dBm (0.1321 W)
To at Mandal	IEEE 802.11ax (HE160): 20.09 dBm (0.1020 W)
Test Model	RZ09-0482
Sample Status	Engineering Sample
EUT Modification(s)	N/A

### NOTE:

(1) The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.

# (2) Channel List:

IEEE 802.11ac (VHT20)   IEEE 802.11ac (VHT40)   IEEE 802.11ax (HE40)   IEEE 802.11ax (HE80)   IEEE 802.11ax (HE160)								
*169 5845 *167 5835 *171 5855 *163 5815 173 5865 175 5875	IEEE 802.11n (HT20) IEEE 802.11ac (VHT20)		E 802.11n (HT20)   IEEE 802.11n (HT40)   IEEE 802.11ac (VHT40)   IEEE 802.11ac (VHT40)   IEEE 802.11ac (HE40)				IEEE 802.11ac (VHT160) IEEE 802.11ax (HE160)	
173 5865 175 5875	Channel		Channel		Channel		Channel	Frequency (MHz)
	*169	5845	*167	5835	*171	5855	*163	5815
177 5885	173	5865	175	5875				
	177	5885						

Note: \* U-NII 3 & U-NII 4 span channels

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(3) Table for Filed Antenna:

Ant.	Manufacturer	P/N	Type	Connector	Gain (dBi)
1	Amphenol	BY5973-15-001-C	PIFA	N/A	3.70
2	Amphenol	BY5962-15-002-C	PIFA	N/A	3.72

### Note:

- 1) This EUT supports MIMO 2X2, any transmit signals are uncorrelated with each other, so Directional gain= 10log[(10<sup>G1/10</sup>+10<sup>G2/10</sup>+...10<sup>GN/10</sup>)/N]dBi, that is Directional gain=10log[(10<sup>3.70/10</sup>+10<sup>3.72/10</sup>)/2]dBi= 3.71.
- 2) Ant.1 refers to main antenna, Ant.2 refers to aux antenna.
- 3) The AUX antenna connector of the module connected to the MAIN antenna of the EUT and the MAIN antenna connector of the module connected to the AUX antenna of the EUT.
- (4) The above Antenna information are derived from the antenna data sheet provided by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

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# 2.2 TEST MODES

Test Items	Test mode	Channel	Note
AC power line conducted emissions	Normal/Idle	-	-
Transmitter Radiated Emissions (below 1GHz)	TX Mode_IEEE 802.11ax (HE160)	163	-
	TX Mode_IEEE 802.11a	169	
	TX Mode_IEEE 802.11ac (VHT80)	171	Bandedge
Transmitter Radiated Emissions	TX Mode_IEEE 802.11ax (HE160)	163	
(above 1GHz)	TX Mode_IEEE 802.11a	169	
	TX Mode_IEEE 802.11ac (VHT80)	171	Harmonic
	TX Mode_IEEE 802.11ax (HE160)	163	
	TX Mode_IEEE 802.11a  TX Mode_IEEE 802.11ac (VHT20)  TX Mode_IEEE 802.11ax (HE20)	169/173/177	
Maximum E.I.R.P.	TX Mode_IEEE 802.11ac (VHT40) TX Mode_IEEE 802.11ax (HE40)	167/175	-
	TX Mode_IEEE 802.11ac (VHT80) TX Mode_IEEE 802.11ax (HE80)	171	
	TX Mode_IEEE 802.11ac (VHT160) TX Mode_IEEE 802.11ax (HE160)	163	

# NOTE:

(1)	For radiated emission band edge test, both Vertical and Horizontal are evaluated, but only the worst case
	(Vertical) is recorded.

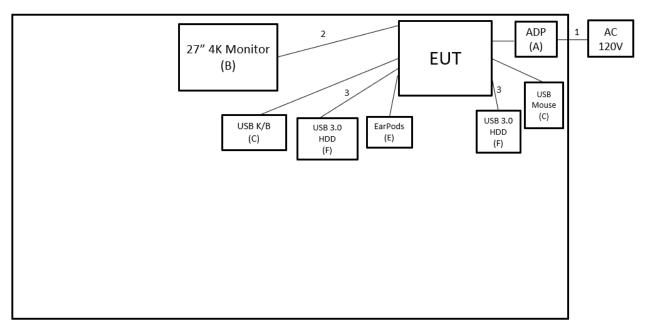
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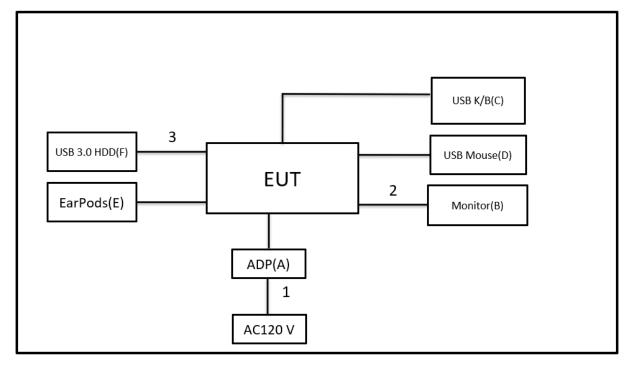
# 2.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Equipment letters and Cable numbers refer to item numbers described in the tables of clause 2.4.

# AC power line conducted emissions



# Radiated Emissions





# 2.4 SUPPORT UNITS

# AC power line conducted emissions

Item	Equipment	Brand	Model No.	Series No.	Remarks
Α	ADP	Razer	RC30-024801	N/A	Supplied by test requester.
В	27" 4K Monitor	DELL	U2720Q	CN-083VF-WSL00-0 B7-332L	Furnished by test lab.
С	USB K/B	DELL	KB216t	/	Furnished by test lab.
D	USB Mouse	DELL	MOCZUL	CN-049TWY-PRC00- 79E-01HA	Furnished by test lab.
E	EarPods	Apple	A1472	N/A	Furnished by test lab.
F	USB 3.0 HDD	WD	WDBC3C0010BSL-0B	WX81A88ALJUC	Furnished by test lab.

Item	Shielded	Ferrite Core	Length	Cable Type	Remarks
1	N/A	N/A	1m	Power Cord	Furnished by test lab.
2	N/A	N/A	1.7m	HDMI Cable	Furnished by test lab.
3	N/A	N/A	0.18m	Type C to Type C Cable	Furnished by test lab.

# Radiated Emissions

Item	Equipment	Brand	Model No. Series No.		Remarks
Α	ADP	Razer	RC30-024801	N/A	Supplied by test requester.
В	27" 4K Monitor	DELL	U2720Q	UB/-33/I	Furnished by test lab.
С	USB K/B	DELL	KB216t	CN-0W33XP-L0300 -797-05TY-A03	Furnished by test lab.
D	USB Mouse	DELL	MOCZUL	CN-049TWY-PRC0 0-79E-01HA	Furnished by test lab.
Е	EarPods	Apple	A1472	N/A	Furnished by test lab.
F	USB 3.0 HDD	WD	WDBC3C0010 BSL-0B	WX81A88ALJUC	Furnished by test lab.

Item	Shielded	Ferrite Core	Length	Cable Type	Remarks
1	N/A	N/A	1m	Power Cord	Supplied by test requester.
2	N/A	N/A	1.7m	HDMI Cable	Furnished by test lab.
3	N/A	N/A	0.18m	Type C to Type C Cable	Furnished by test lab.

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### 3 AC POWER LINE CONDUCTED EMISSIONS TEST

### 3.1 LIMIT

Frequency	Limit (dBμV)			
(MHz)	Quasi-peak	Average		
0.15 - 0.5	66 - 56 *	56 - 46 *		
0.50 - 5.0	56	46		
5.0 - 30.0	60	50		

### NOTE:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " \* " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.
- (3) The test result calculated as following:

Measurement Value = Reading Level + Correct Factor

Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor (if use)

Margin Level = Measurement Value - Limit Value

Calculation example:

Reading Level		Correct Factor		Measurement Value
38.22	+	3.45	=	41.67

Measurement Value		Limit Value		Margin Level
41.67	-	60	=	-18.33

The following table is the setting of the receiver.

Receiver Parameter	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 KHz

### 3.2 TEST PROCEDURE

- a. The EUT was placed 0.8 m above the horizontal ground plane with the EUT being connected to the power mains through a line impedance stabilization network (LISN).
  - All other support equipment were powered from an additional LISN(s).
  - The LISN provides 50 Ohm/50uH of impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle to keep the cable above 40 cm.
- c. Excess I/O cables that are not connected to a peripheral shall be bundled in the center.
  - The end of the cable will be terminated, using the correct terminating impedance.
  - The overall length shall not exceed 1 m.
- d. The LISN is spaced at least 80 cm from the nearest part of the EUT chassis.
- e. For the actual test configuration, please refer to the related Item EUT TEST PHOTO.

### NOTE:

- (1) In the results, each reading is marked as Peak, QP or AVG per the detector used. BW=9 kHz (6 dB Bandwidth)
- (2) All readings are Peak unless otherwise stated QP or AVG in column of Note. Both the QP and the AVG readings must be less than the limit for compliance.

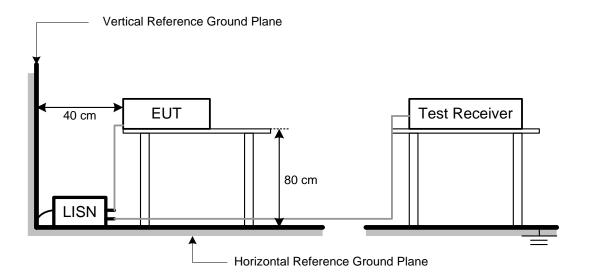
### 3.3 DEVIATION FROM TEST STANDARD

No deviation.

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# 3.4 TEST SETUP



# 3.5 TEST RESULT

Please refer to the APPENDIX A.



### **4 RADIATED EMISSIONS TEST**

### 4.1 LIMIT

In case the emission fall within the restricted band specified on 15.205, then the 15.209 limit in the table below has to be followed.

LIMITS OF RADIATED EMISSIONS MEASUREMENT (9 kHz to 1000 MHz)

Frequency	Field Strength	Measurement Distance
(MHz)	(microvolts/meter)	(meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
960~1000	500	3

### LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

ENVITO OF CIVIVALED ENVICOION COT OF THE RECTINICIED BANDO							
Frequency (MHz)	EIRP Limit (dBm)	Equivalent Field Strength at 3m (dBµV/m)					
(IVITIZ)	(ubiii)	(αρμν/ιιι)					
5150-5250	-27	68.3					
5250-5350	-27	68.3					
5470-5725	-27	68.3					
	-27 (NOTE 2)	68.3					
5725-5850	10 (NOTE 2)	105.3					
3723-3630	15.6 (NOTE 2)	110.9					
	27 (NOTE 2)	122.3					

### NOTE:

(1) The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$$E = \frac{1000000\sqrt{30P}}{3}$$
 $\mu$ V/m, where P is the eirp (Watts)

- (2) According to FCC 16-24,All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.
- (3) The test result calculated as following:

  Measurement Value = Reading Level + Correct Factor

  Correct Factor = Antenna Factor + Cable Loss Amplifier Gain(if use)

  Margin Level = Measurement Value Limit Value

Calculation example:

Reading Level		Correct Factor		Measurement Value
36.23	+	-11.97	II	24.26

Measurement Value		Limit Value		Margin Level
24.26	-	40	=	-15.74

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Spectrum Parameter	Setting		
Attenuation	Auto		
Start Frequency	1000 MHz		
Stop Frequency	10th carrier harmonic		
RBW / VBW	1MHz / 3MHz for Peak,		
(Emission in restricted band)	1MHz / 1/T for Average		

Spectrum Parameter	Setting		
Attenuation	Auto		
Start ~ Stop Frequency	9KHz~90KHz for PK/AVG detector		
Start ~ Stop Frequency	90KHz~110KHz for QP detector		
Start ~ Stop Frequency	110KHz~490KHz for PK/AVG detector		
Start ~ Stop Frequency	490KHz~30MHz for QP detector		
Start ~ Stop Frequency	30MHz~1000MHz for QP detector		

# 4.2 TEST PROCEDURE

- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- c. The height of the equipment or of the substitution antenna shall be 0.8 m or 1.5 m, the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- e. The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1GHz.
- f. The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- g. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform. (below 1GHz)
- h. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (above 1GHz)
- i. For the actual test configuration, please refer to the related Item EUT TEST PHOTO.

### 4.3 DEVIATION FROM TEST STANDARD

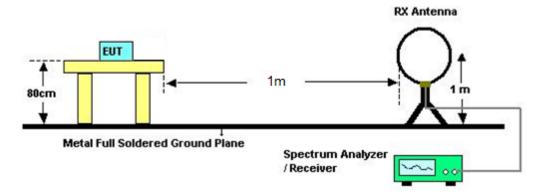
No deviation.

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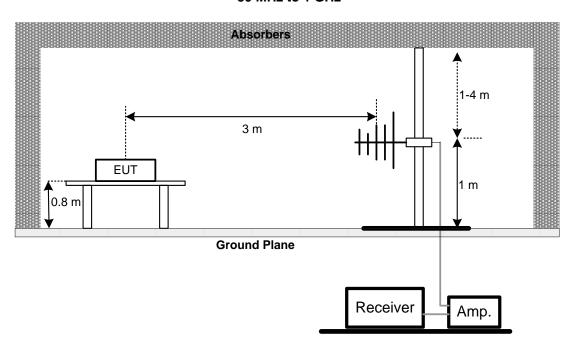


# 4.4 TEST SETUP

# 9 kHz to 30 MHz

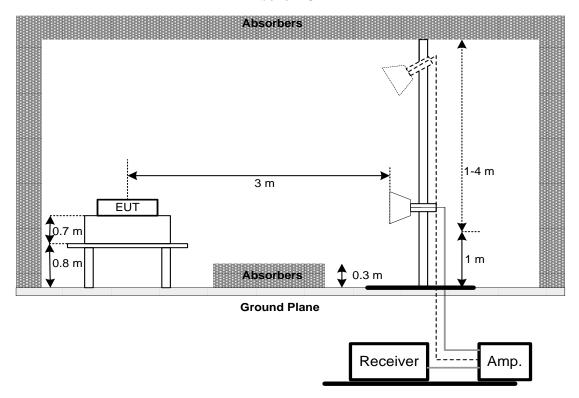


# 30 MHz to 1 GHz





# **Above 1 GHz**



### 4.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

# 4.6 TEST RESULT - BELOW 30 MHZ

There were no emissions found below 30 MHz within 20 dB of the limit.

### 4.7 TEST RESULT - 30 MHZ TO 1 GHZ

Please refer to the APPENDIX B.

# 4.8 TEST RESULT - ABOVE 1 GHZ

Please refer to the APPENDIX C.

### NOTE:

(1) No limit: This is fundamental signal, the judgment is not applicable. For fundamental signal judgment was referred to Peak output test.

### 5 MAXIMUM E.I.R.P. TEST

### 5.1 LIMIT

Section	Equipment Category	Maximum e.i.r.p. Limit
	Indoor access point	36
15.407(a)	Subordinate device	36
	Client devices	30

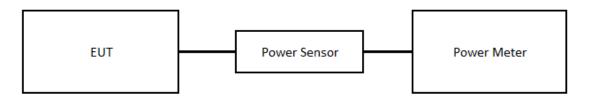
### 5.2 TEST PROCEDURE

- a. The EUT was directly connected to the power meter and antenna output port as show in the block diagram below.
- b. Method PM-G (Measurement using a gated RF average power meter): Measurements may be performed using a wideband gated RF power meter provided that the gateparameters are adjusted such that the power is measured only when the EUT is transmitting at itsmaximum power control level. Since the measurement is made only during the ON time of thetransmitter, no duty cycle correction factor is required.

### 5.3 DEVIATION FROM TEST STANDARD

No deviation.

### 5.4 TEST SETUP



### 5.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

### 5.6 TEST RESULT

Please refer to the APPENDIX D



# **6 LIST OF MEASURING EQUIPMENTS**

	AC Power Line Conducted Emissions								
Item	Item Kind of Manufacturer Equipment		Type No.	Serial No.	Calibrated Date	Calibrated Until			
1	TWO-LINE V-NETWORK	R&S	ENV216 101521		2022/9/28	2023/9/27			
2	Test Cable	EMCI	EMCCFD300-BM -BMR-5000	220331	2022/3/31	2023/3/30			
3	EMI Test Receiver	R&S	ESR 7	101433	2022/11/16	2023/11/15			
4	Measurement		EZ_EMC (Version NB-03A1-01)	N/A	N/A	N/A			

	Radiated Emissions								
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until			
1	Preamplifier	EMCI	EMC330N	980850	2022/9/19	2023/9/18			
2	Preamplifier	EMCI	EMC118A45SE	980819	2022/3/8	2023/3/7			
3	Preamplifier	EMCI	EMC184045SE	980882	2022/2/9	2023/2/8			
4	Preamplifier	EMCI	EMC001340	980579	2022/9/30	2023/9/29			
5	Test Cable	EMCI	EMC104-SM-SM- 1000	220319	2022/3/15	2023/3/14			
6	Test Cable	EMCI	EMC104-SM-SM- 3000	220322	2022/3/15	2023/3/14			
7	Test Cable	EMCI	EMC104-SM-SM- 7000	220324	2022/3/15	2023/3/14			
8	EXA Signal Analyzer	keysight	N9020B	MY57120120	2022/3/7	2023/3/6			
9	Loop Ant	Electro-Metrics	EMCI-LPA600	291	2022/9/19	2023/9/18			
10	Horn Antenna	RFSPIN	DRH18-E	211202A18EN	2022/5/18	2023/5/17			
11	Horn Ant	Schwarzbeck	BBHA 9170D	1136	2022/5/18	2023/5/17			
12	Log-bicon Antenna	Schwarzbeck	VULB9168	1369	2022/5/20	2023/5/19			
13	6dB Attenuator	EMCI	EMCI-N-6-06	AT-N0625	2022/5/20	2023/5/19			
14	Test Cable	EMCI	EMC101G-KM-K M-3000	220329	2022/3/15	2023/3/14			
15	Test Cable	EMCI	EMC102-KM-KM- 1000	220327	2022/3/15	2023/3/14			
16	Measurement Software	EZ	EZ_EMC (Version NB-03A1-01)	N/A	N/A	N/A			

Maximum E.I.R.P.						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Power Meter	Anritsu	ML2495A	1128008	2022/6/1	2023/5/31
2	Power Sensor	Anritsu	MA2411B	1126001	2022/6/1	2023/5/31

Remark: "N/A" denotes no model name, no serial no. or no calibration specified. All calibration period of equipment list is one year.

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7 EUT TEST PHOTO					
Please refer to document Appendix No.: TP-2212C001-1 (APPENDIX-TEST PHOTOS).					
8 EUT PHOTOS					
Please refer to document Appendix No.: EP-2212C001-1 (APPENDIX-EUT PHOTOS).					

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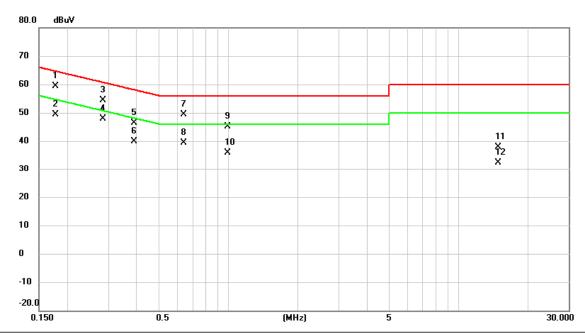


APPENDIX A	AC POWER LINE CONDUCTED EMISSIONS

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Test Mode	Normal	Tested Date	2023/1/6
Test Frequency	-	Phase	Line

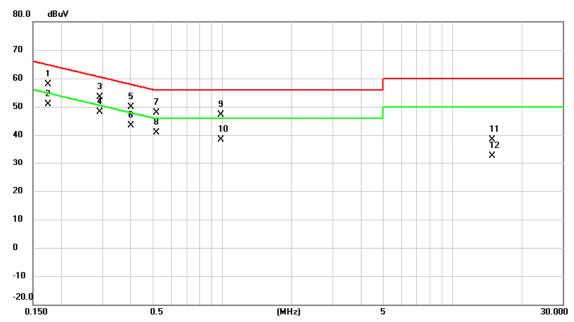


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBu∨	dB	dBu∨	dBu∨	dB	Detector	Comment
1		0.1770	49.65	9.63	59.28	64.63	-5.35	QP	
2		0.1770	39.72	9.63	49.35	54.63	-5.28	AVG	
3		0.2850	44.70	9.63	54.33	60.67	-6.34	QP	
4	*	0.2850	38.24	9.63	47.87	50.67	-2.80	AVG	
5		0.3907	36.82	9.63	46.45	58.05	-11.60	QP	
6		0.3907	30.37	9.63	40.00	48.05	-8.05	AVG	
7		0.6405	39.69	9.64	49.33	56.00	-6.67	QP	
8		0.6405	29.65	9.64	39.29	46.00	-6.71	AVG	
9		0.9960	35.34	9.67	45.01	56.00	-10.99	QP	
10		0.9960	26.10	9.67	35.77	46.00	-10.23	AVG	
11		14.8830	27.99	9.89	37.88	60.00	-22.12	QP	
12		14.8830	22.40	9.89	32.29	50.00	-17.71	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



ı				
	Test Mode	Normal	Tested Date	2023/1/6
	Test Frequency	-	Phase	Neutral

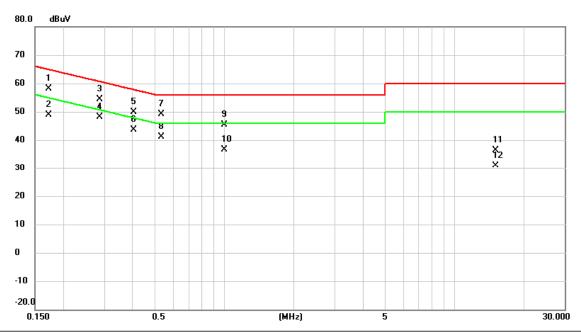


No. Mk	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBu∀	dB	dBu∨	dBu∨	dB	Detector	Comment
1	0.1748	48.22	9.65	57.87	64.73	-6.86	QP	
2	0.1748	41.29	9.65	50.94	54.73	-3.79	AVG	
3	0.2917	43.65	9.64	53.29	60.48	-7.19	QP	
4 *	0.2917	38.42	9.64	48.06	50.48	-2.42	AVG	
5	0.4020	40.26	9.64	49.90	57.81	-7.91	QP	
6	0.4020	33.83	9.64	43.47	47.81	-4.34	AVG	
7	0.5167	38.22	9.64	47.86	56.00	-8.14	QP	
8	0.5167	31.16	9.64	40.80	46.00	-5.20	AVG	
9	0.9870	37.34	9.68	47.02	56.00	-8.98	QP	
10	0.9870	28.65	9.68	38.33	46.00	-7.67	AVG	
11	14.8853	28.53	9.97	38.50	60.00	-21.50	QP	
12	14.8853	22.73	9.97	32.70	50.00	-17.30	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode	Idle	Tested Date	2023/1/6
Test Frequency	-	Phase	Line

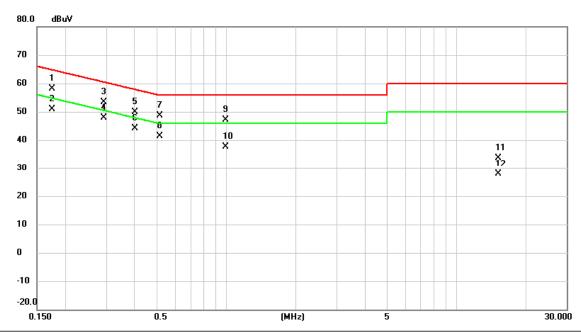


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBu∨	dB	dBu∨	dBu∨	dB	Detector	Comment
1		0.1725	48.52	9.64	58.16	64.84	-6.68	QP	
2		0.1725	39.22	9.64	48.86	54.84	-5.98	AVG	
3		0.2872	44.76	9.63	54.39	60.60	-6.21	QP	
4	*	0.2872	38.54	9.63	48.17	50.60	-2.43	AVG	
5		0.4042	40.28	9.63	49.91	57.77	-7.86	QP	
6		0.4042	33.88	9.63	43.51	47.77	-4.26	AVG	
7		0.5325	39.43	9.63	49.06	56.00	-6.94	QP	
8		0.5325	31.52	9.63	41.15	46.00	-4.85	AVG	
9		1.0005	35.62	9.67	45.29	56.00	-10.71	QP	
10		1.0005	27.04	9.67	36.71	46.00	-9.29	AVG	
11		15.0833	26.54	9.90	36.44	60.00	-23.56	QP	
12		15.0833	20.95	9.90	30.85	50.00	-19.15	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



		<b>-</b>	00001110
Test Mode	Idle	Tested Date	2023/1/6
Test Frequency	-	Phase	Neutral



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBu∨	dB	dBu∨	dBu∨	dB	Detector	Comment
1		0.1748	48.52	9.65	58.17	64.73	-6.56	QP	
2		0.1748	41.23	9.65	50.88	54.73	-3.85	AVG	
3		0.2917	43.65	9.64	53.29	60.48	-7.19	QP	
4	*	0.2917	38.19	9.64	47.83	50.48	-2.65	AVG	
5		0.4020	40.23	9.64	49.87	57.81	-7.94	QP	
6		0.4020	34.52	9.64	44.16	47.81	-3.65	AVG	
7		0.5144	38.91	9.64	48.55	56.00	-7.45	QP	
8		0.5144	31.62	9.64	41.26	46.00	-4.74	AVG	
9		0.9892	37.42	9.68	47.10	56.00	-8.90	QP	
10		0.9892	28.06	9.68	37.74	46.00	-8.26	AVG	
11		15.1463	23.61	9.98	33.59	60.00	-26.41	QP	
12		15.1463	17.83	9.98	27.81	50.00	-22.19	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



# APPENDIX B RADIATED EMISSIONS - 30 MHZ TO 1 GHZ

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_	Test Mo	de	IEEE	802.1	11ax	(HE1	60)		Т	est Date	)	202	3/2/1	
	st Frequ				5MH					olarizatio			tical	
	Temp			2	3°C					Hum.		59	9%	
80.0 dB	uV/m													7
70														
60														
50														
40			Ž ž				×		5 X			6		
30	_		××											
20														
10														
0.0														
30.000	127.00				418.		515.		612.			6.00	1000.00	MH
No.	Mk.	Freq.		ading evel		orrect actor		easure- ment		Limit	Over			
		MHz	dE	₿uV		dB	d	BuV/m	(	dBuV/m	dB	Detector	Comme	ent
1	!	30.9710	) 48	3.62	-1	2.73	,	35.89		40.00	-4.11	QP		
2		270.534		'.08		2.21	- ;	34.87		46.00	-11.13	peak		
3		297.017		5.40		1.51		33.89		46.00	-12.11	peak		
4	*	475.672	4 49	.81	-(	5.94	-	42.87		46.00	-3.13	QP		
5		591.432	8 42	2.81	-4	1.42	- ;	38.39		46.00	-7.61	peak		
6		891.367	4 39	.33	-(	0.03	- ;	39.30		46.00	-6.70	peak		

- (1) Measurement Value = Reading Level + Correct Factor.
  (2) Margin Level = Measurement Value Limit Value.

•	Test Mo	de	IEEE 8	02.11ax	(HE1	60)		Test Da		20	23/2/1	
Tes	st Frequ	ency		5815MI				Polarizat			rizontal	
	Temp			23°C				Hum.			59%	
80.0 dE	BuV/m											٦
70												
60												
50												
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30X	^											
20												
10												
0.0												
30.000	127.00	224.00	321.00	) 418	3.00	515.00	6	12.00	709.00	806.00	1000.00	Пмн
No.	Mk.	Freq.	Read Leve		orrect actor	Meas me		Limit	Ove	r		
		MHz	dBu	V	dB	dBu\	//m	dBuV/r	n dB	Detecto	r Comm	ent
1	!	62.1368	47.1	4 -	12.44	34.7	70	40.00	-5.30	0 QP		
2		96.4464	52.2	:3 -	16.76	35.4	17	43.50	-8.0	3 peak		
3	*	270.7127			12.21	41.7	76	46.00			·	
4		297.1283			11.51	39.9		46.00				
5		474.6132			6.98	39.9		46.00				
6		891.2437	36.8	8 -	-0.03	36.8	35	46.00	-9.1	5 peak		

- (1) Measurement Value = Reading Level + Correct Factor.
  (2) Margin Level = Measurement Value Limit Value.



# APPENDIX C RADIATED EMISSIONS - ABOVE 1 GHZ

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7	Test Mod	de	IEEE	802.11a		Test Date		202	3/2/3	
Tes	st Freque	ency		5MHz		Polarization	า		tical	
	Temp		2	3°C		Hum.		59	59%	
130.0 dB	uV/m									_
20										1
10					<u> </u>					4
					, <del>3</del>					
00		•			<b>1</b>					1
10					+					_
,										
80 /										1
70 📈					B/ \_					-
so					/v   v/v					
	2	34		N.	'	7			8	
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40										
30										+
20										1
10.0										
	0 5685.00	5725.00	5765.00	5805.00	5845.00 5	885.00 59	25.00 596	5.00	6045.00	_ MH
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over			_
		'	Level	Factor	ment					
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comme	∍nt
1	*	5646.827	49.43	1.79	51.22	68.20	-16.98	peak		
2		5682.507	50.30	1.86	52.16	92.26	-40.10	peak		
3		5716.000	49.67	1.92	51.59	109.68	-58.09	peak		
4		5721.160	48.95	1.93	50.88	113.44	-62.56	peak		
5		5845.000	102.25	2.19	104.44			peak	No Lim	
6		5845.000	93.72	2.19	95.91			AVG	No Lim	nit
7		5916.493	49.29	2.33 2.61	51.62 52.29	94.44	-42.82 -35.91	peak		
8		6022.813	49.68			88.20		peak		

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



-	Test Mo	de	IEEE 802.	11ac (VHT8	30)	Test Date		202	3/2/1	
Tes	st Frequ	iency		55MHz		Polarizatio	n		tical	
	Temp	1		23°C		Hum.		59	9%	
130.0 dB	luV/m									
		,								
120										
10										
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90				\A∫\V	), N× 1, M/N					
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70 🕌										
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70 1 X		23 hayan Algadrayad	method	الكمالمين		Management	پاس پیران بالدار			
50 W^~	ad the parties	And the section in the second	was the part of the	MAR.		- Mary Marie	AM S	malinalyeu	"Whiteledical contraction	
40										
30										
20										
10.0										
5655.00	0 5695.0	0 5735.0	0 5775.00	5815.00	5855.00 5	895.00 59	135.00 597	75.00	6055.00 MH	
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over			
		•	Level	Factor	ment					
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	*	5658.720	52.61	1.81	54.42	74.65	-20.23	peak		
2		5717.253		1.92	54.45	110.03	-55.58	peak		
		F704 044	53.78	1.93	55.71	113.17	-57.46	peak		
3		5721.040								
4		5855.000	99.06	2.21	101.27			peak	No Limit	
4 5		5855.000 5855.000	99.06 99.29	2.21	91.50			AVG	No Limit No Limit	
4		5855.000	99.06 89.29 3 60.88			108.78 88.20	-45.60 -29.65			

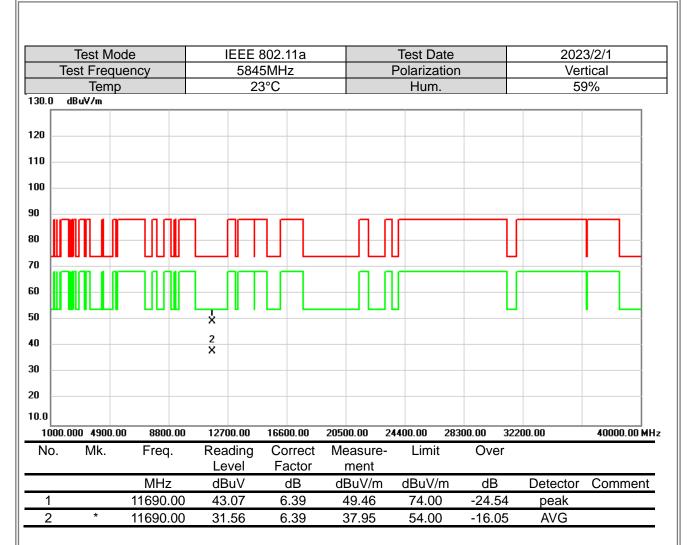
- (1) Measurement Value = Reading Level + Correct Factor.
  (2) Margin Level = Measurement Value Limit Value.



	Test I		IEEE	802.11a			Test Date			3/2/1
	Test Fre			5815M		Po	olarization			tical
130.0	Ter dBuV/m	mp		23°C	,		Hum.		59	9%
130.0	UD UY/III									
120 110 100										
90				VVV	<b>\</b> \\\					
70 60 50	WANT OF THE PARTY	Myster where the	2 X W^W**				;			Munday
40 30										
20 10.0										
	5.000 565						5.00 589		5.00	6015.00 MH
No.	. Mk.	Freq.		-	orrect Nactor	Measure- ment	Limit	Over		
		MHz	d	BuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5644.1	07 6°	1.14	1.78	62.92	68.20	-5.28	peak	
		5698.0	67 6°	1.32	1.89	63.21	103.77	-40.56	peak	
2					1.92	61.91	110.12	-48.21	peak	
3		5717.5	87 59	9.99	1.92	01.01				
		5717.5 5721.6		9.99 7.55	1.92	59.48	114.45	-54.97	peak	
3			00 5	7.55				-54.97		No Limit
3 4		5721.6	00 5 00 9	7.55 3.42	1.93	59.48		-54.97	peak	No Limit No Limit
3 4 5		5721.6 5815.0	00 5 00 93 00 82	7.55 3.42 2.26	1.93 2.13	59.48 95.55		-54.97 -45.77	peak peak	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.





- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.





- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



Test Mod		IEEE 802.1		60)	Test Da			3/2/1
Test Freque	ency		5MHz		Polariza			tical
Temp		2	3°C		Hum.		59	9%
30.0 dBuV/m								
20								
		7 1	7 (-7	П	ПГ			
) <b>           </b>								
		1						
		2 X						
0.0								
1000.000 4900.00	8800.00	12700.00	16600.00	20500.00	24400.00	28300.00 323	200.00	40000.00 MF
No. Mk.	Freq.	Reading Level	Correct Factor	Measure ment	- Limit	Over		
	MHz	dBuV	dB	dBuV/m	dBuV/ı	m dB	Detector	Comment
1	11710.00	42.25	6.41	48.66	74.00	-25.34	peak	
2 *	11710.00	29.96	6.41	36.37	54.00	-17.63	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mod	le	IEEE 802.	11ac (VHT8	30)	Т	est Date	е	202	3/2/1
Test Freque	ency	585	5MHz		Po	olarizatio	on	Horiz	zontal
Temp		2	3°C			Hum.		59	9%
30.0 dBuV/m									
20									
10									
10									
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	ппп						L		
				$-\!\!\!\!\!-\!$					
		X					L	_	
)		2							
)		X							
)									
0.0	8800.00	10700.00	16600.00	20500.00	244	20.00		2200.00	40000 00 141
1000.000 4900.00 No. Mk.	Freq.	12700.00 Reading	Correct	Measu		00.00 2 Limit	8300.00 3 Over	2200.00	40000.00 MF
INO. IVIN.	i ieq.	Level	Factor	ment		LIIIII	Ovei		
	MHz	dBuV	dB	dBuV/		dBuV/m	dB	Detector	Comment
4	11710.00	43.51	6.41	49.92	)	74.00	-24.08	peak	
1	117 10.00	43.31	0.41	43.32	-	7 7.00	24.00	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



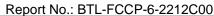


- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



Test Mode Test Frequency		IEEE 802.	11ax (HE16	0)	Test Date			3/2/1
		5815MHz			Polarization			Horizontal
Temp		2	3°C		Hum.		59	9%
30.0 dBuV/m								
20								
10								
00								
		7 ///	7 (-)	П	пг	1		
0								
		<del></del>	<del></del>		п			
0								
0		1 X			-			
0		2 X						
0								
0								
0.0								
1000.000 4900.00	8800.00	12700.00	16600.00	20500.00	24400.00	28300.00 322	00.00	40000.00 MH
No. Mk.	Freq.	Reading	Correct	Measure	- Limit	Over		
	MHz	Level dBuV	Factor dB	ment dBuV/m	dBuV/m	n dB	Detector	Comment
1	11630.00	41.67	6.36	48.03	74.00	-25.97	peak	Comment
•			0.00	.0.00	,	20.07	Pour	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.





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	APPENDIX D	MAXIMUM E.I.R.P.

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0.0353

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Test Mode	IEEE 802.11a	_Ant. 1		Tested Date	2023/1/1	6	
					<u> </u>		
Test Frequency	Conducted	Conducted	E.I.R.P.	E.I.R.P.	E.I.R.P. Limit	E.I.R.P. Limit	Result
(MHz)	Power (dBm)	Power (W)	(dBm)	(W)	(dBm)	(W)	Nesuit
5845	12.51	0.0178	16.23	0.0420	30.00	1.0000	Pass
5865	12.48	0.0177	16.20	0.0417	30.00	1.0000	Pass
5885	12.41	0.0174	16.13	0.0410	30.00	1.0000	Pass

-	Test Mode	IEEE 802.11a	_Ant. 2		Tested Date	2023/1/1	6	
П	Test Frequency		Conducted	E.I.R.P.		E.I.R.P. Limit		Result
	(MHz)	Power (dBm)	Power (W)	(dBm)	(W)	(dBm)	(W)	rtoodit
١L	5845	13.02	0.0200	16.74	0.0472	30.00	1.0000	Pass
	5865	12.94	0.0197	16.66	0.0463	30.00	1.0000	Pass
	5885	12.52	0.0179	16.24	0.0421	30.00	1.0000	Pass

Test Mode	IEEE 802.11a	_Total	Tested Date	2023/1/1	6		
Test Frequency	Conducted	Conducted	E.I.R.P.	E.I.R.P.	E.I.R.P. Limit	E.I.R.P. Limit	Result
(MHz)	Power (dBm)	Power (W)	(dBm)	(W)	(dBm)	(W)	Nesuit
5845	15.78	0.0379	19.50	0.0892	30.00	1.0000	Pass
5865	15.73	0.0374	19.45	0.0880	30.00	1.0000	Pass

0.0831

30.00

1.0000

19.20

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Test Mode	IEEE 802.11a	c (VHT20) Ai	nt. 1		Tested Date	2023/1/1	6
	ı	/_					
Test Frequency	Conducted	Conducted	E.I.R.P.	E.I.R.P.	E.I.R.P. Limit	E.I.R.P. Limit	<b>5</b>
(MHz)	Power (dBm)	Power (W)	(dBm)	(W)	(dBm)	(W)	Result
5845	12.71	0.0187	16.43	0.0440	30.00	1.0000	Pass
5865	12.56	0.0180	16.28	0.0425	30.00	1.0000	Pass
5885	12.50	0.0178	16.22	0.0419	30.00	1.0000	Pass
			<u>-</u>				
Test Mode	IEEE 802.11a	c (VHT20) Aı	nt. 2		Tested Date	2023/1/1	6
	ı	, ,=					
Test Frequency	Conducted	Conducted	E.I.R.P.	E.I.R.P.	FIRPLimit	E.I.R.P. Limit	
(MHz)	Power (dBm)	Power (W)	(dBm)	(W)	(dBm)	(W)	Result
5845	13.14	0.0206	16.86	0.0485	30.00	1.0000	Pass
5865	12.95	0.0197	16.67	0.0465	30.00	1.0000	Pass
5885	12.64	0.0184	16.36	0.0433	30.00	1.0000	Pass
Test Mode	IEEE 802.11a	c (VHT20) To	otal		Tested Date	2023/1/1	6
	ı	/_					
Test Frequency	Conducted	Conducted	E.I.R.P.	E.I.R.P.	FIRPLimit	E.I.R.P. Limit	
(MHz)	Power (dBm)	Power (W)	(dBm)	(W)	(dBm)	(W)	Result
5845	15.94	0.0393	19.66	0.0925	30.00	1.0000	Pass
5865	15.77	0.0378	19.49	0.0889	30.00	1.0000	Pass
5885	15.58	0.0361	19.30	0.0851	30.00	1.0000	Pass
	10.00	0.000.	10.00	0.000	00.00		. 0.00
Test Mode	IEEE 802.11a	c (VHT40) Ai	nt. 1		Tested Date	2023/1/1	6
		(******/_***					
Test Frequency	Conducted	Conducted	E.I.R.P.	E.I.R.P.	FIRPLimit	E.I.R.P. Limit	
(MHz)	Power (dBm)	Power (W)	(dBm)	(W)	(dBm)	(W)	Result
5835	14.80	0.0302	18.52	0.0711	30.00	1.0000	Pass
5875	15.11	0.0324	18.83	0.0764	30.00	1.0000	Pass
					•		
Test Mode	IEEE 802.11a	c (VHT40)_Aı	nt. 2		Tested Date	2023/1/1	6
	•	. ,—					
Test Frequency	Conducted	Conducted	E.I.R.P.	E.I.R.P.	E.I.R.P. Limit	E.I.R.P. Limit	D
(MHz)	Power (dBm)	Power (W)	(dBm)	(W)	(dBm)	(W)	Result
5835	14.98	0.0315	18.70	0.0741	30.00	1.0000	Pass
5875	15.20	0.0331	18.92	0.0780	30.00	1.0000	Pass
<u> </u>							
Test Mode	IEEE 802.11a	c (VHT40)_To	otal		Tested Date	2023/1/1	6
		,					
Test Frequency	Conducted	Conducted	E.I.R.P.	E.I.R.P.	E.I.R.P. Limit	E.I.R.P. Limit	
(MHz)	Power (dBm)	Power (W)	(dBm)	(W)	(dBm)	(W)	Result
5835	17.90	0.0617	21.62	0.1453	30.00	1.0000	Pass
					_		
5875	18.17	0.0655	21.89	0.1544	30.00	1.0000	Pass





Test Mode	IEEE 802.11a	c (VHT80)_Ar	nt. 1		Tested Date	2023/1/1	6
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Test Frequency		Conducted	E.I.R.P.	E.I.R.P.	E.I.R.P. Limit		Result
(MHz)	Power (dBm)	Power (W)	(dBm)	(W)	(dBm)	(W)	
5855	14.12	0.0258	17.84	0.0608	30.00	1.0000	Pass
	1				1		
Test Mode	IEEE 802.11a	c (VHT80)_Ar	nt. 2		Tested Date	2023/1/1	6
est Frequency	Conducted	Conducted	E.I.R.P.	E.I.R.P.	E.I.R.P. Limit	EIDDlimit	. ]
(MHz)	Power (dBm)	Power (W)	(dBm)	(W)	(dBm)	(W)	Result
5855	14.61	0.0289	18.33	0.0681	30.00	1.0000	Pass
	14.01	0.0203	10.00	0.0001	30.00	1.0000	1 433
Test Mode	IEEE 802.11a	c (\/HT80\ Tc	.tal		Tested Date	2023/1/1	6
lest Mode	ILLE 602.11a	C (VIIIOO)_1C	lai		rested Date	2023/1/1	0
est Frequency	Conducted	Conducted	E.I.R.P.	E.I.R.P.	E.I.R.P. Limit	E.I.R.P. Limit	
(MHz)	Power (dBm)	Power (W)	(dBm)	(W)	(dBm)	(W)	Result
5855	17.38	0.0547	21.10	0.1289	30.00	1.0000	D
			21.10	0.1203	30.00	1.0000	Pass
		o () (LIT4CO)		0.1203			•
est Mode	IEEE 802.11a	c (VHT160)_/		0.1200	Tested Date	2023/1/1	•
	IEEE 802.11a	c (VHT160)_/		E.I.R.P.		2023/1/1	6
	IEEE 802.11a		Ant. 1		Tested Date	2023/1/1	6
est Frequency	IEEE 802.11a	Conducted	Ant. 1	E.I.R.P.	Tested Date  E.I.R.P. Limit	2023/1/1 E.I.R.P. Limit	6
est Frequency (MHz) 5815	Conducted Power (dBm) 13.12	Conducted Power (W) 0.0205	E.I.R.P. (dBm) 16.84	E.I.R.P. (W)	Tested Date  E.I.R.P. Limit (dBm) 30.00	2023/1/1 E.I.R.P. Limit (W) 1.0000	6 Result
est Frequency (MHz) 5815	IEEE 802.11a  Conducted Power (dBm)	Conducted Power (W) 0.0205	E.I.R.P. (dBm) 16.84	E.I.R.P. (W)	Tested Date  E.I.R.P. Limit (dBm)	2023/1/1 E.I.R.P. Limit (W)	6 Result
Fest Frequency (MHz) 5815 Fest Mode	Conducted Power (dBm) 13.12	Conducted Power (W) 0.0205 c (VHT160)_F	E.I.R.P. (dBm) 16.84	E.I.R.P. (W) 0.0483	Tested Date  E.I.R.P. Limit (dBm) 30.00  Tested Date	2023/1/1 E.I.R.P. Limit (W) 1.0000	6 Result Pass
Fest Frequency (MHz) 5815 Fest Mode	Conducted Power (dBm) 13.12	Conducted Power (W) 0.0205 c (VHT160)_A	E.I.R.P. (dBm) 16.84	E.I.R.P. (W)	Tested Date  E.I.R.P. Limit (dBm) 30.00	2023/1/1 E.I.R.P. Limit (W) 1.0000	6 Result Pass
est Frequency (MHz) 5815  est Mode  est Frequency	Conducted Power (dBm) 13.12	Conducted Power (W) 0.0205 c (VHT160)_F	E.I.R.P. (dBm) 16.84 Ant. 2	E.I.R.P. (W) 0.0483	Tested Date  E.I.R.P. Limit (dBm) 30.00  Tested Date  E.I.R.P. Limit	2023/1/1 E.I.R.P. Limit (W) 1.0000 2023/1/1	6 Result Pass
Test Frequency (MHz) 5815 Test Mode Test Frequency (MHz)	Conducted Power (dBm) 13.12  IEEE 802.11a  Conducted Power (dBm)	Conducted Power (W) 0.0205 c (VHT160)_A Conducted Power (W)	E.I.R.P. (dBm) 16.84 Ant. 2 E.I.R.P. (dBm)	E.I.R.P. (W) 0.0483	Tested Date  E.I.R.P. Limit (dBm) 30.00  Tested Date  E.I.R.P. Limit (dBm)	2023/1/1 E.I.R.P. Limit (W) 1.0000  2023/1/1 E.I.R.P. Limit (W)	6 Result Pass 6 Result
Test Frequency (MHz) 5815 Test Mode Test Frequency (MHz) 5815	Conducted Power (dBm) 13.12  IEEE 802.11a  Conducted Power (dBm)	Conducted Power (W) 0.0205 c (VHT160)_A Conducted Power (W) 0.0226	E.I.R.P. (dBm) 16.84 Ant. 2 E.I.R.P. (dBm) 17.26	E.I.R.P. (W) 0.0483	Tested Date  E.I.R.P. Limit (dBm) 30.00  Tested Date  E.I.R.P. Limit (dBm)	2023/1/1 E.I.R.P. Limit (W) 1.0000  2023/1/1 E.I.R.P. Limit (W)	Result Pass 6 Result Pass
Test Frequency (MHz) 5815  Test Mode  Test Frequency (MHz) 5815  Test Mode	Conducted Power (dBm) 13.12  IEEE 802.11a  Conducted Power (dBm) 13.54  IEEE 802.11a	Conducted Power (W) 0.0205  c (VHT160)_A  Conducted Power (W) 0.0226  c (VHT160)_T	E.I.R.P. (dBm) 16.84  Ant. 2  E.I.R.P. (dBm) 17.26	E.I.R.P. (W) 0.0483 E.I.R.P. (W) 0.0532	Tested Date  E.I.R.P. Limit (dBm) 30.00  Tested Date  E.I.R.P. Limit (dBm) 30.00  Tested Date	2023/1/1 E.I.R.P. Limit (W) 1.0000  2023/1/1 E.I.R.P. Limit (W) 1.0000	Result Pass 6 Result Pass 6
5815  Test Mode  Test Frequency (MHz)	Conducted Power (dBm) 13.12  IEEE 802.11a  Conducted Power (dBm) 13.54  IEEE 802.11a	Conducted Power (W) 0.0205 c (VHT160)_A Conducted Power (W) 0.0226	E.I.R.P. (dBm) 16.84 Ant. 2 E.I.R.P. (dBm) 17.26	E.I.R.P. (W) 0.0483	Tested Date  E.I.R.P. Limit (dBm) 30.00  Tested Date  E.I.R.P. Limit (dBm) 30.00	2023/1/1 E.I.R.P. Limit (W) 1.0000  2023/1/1 E.I.R.P. Limit (W) 1.0000	Result Pass  Result Pass  6





Test Mode	IEEE 802.11a	x (HE20)_Ant	. 1		Tested Date	2023/1/10	<u> </u>
Test Frequency		Conducted	E.I.R.P.	E.I.R.P.	E.I.R.P. Limit	E.I.R.P. Limit	Result
(MHz)	Power (dBm)	Power (W)	(dBm)	(W)	(dBm)	(W)	Kesuit
5845	12.99	0.0199	16.71	0.0469	30.00	1.0000	Pass
5865	12.84	0.0192	16.56	0.0453	30.00	1.0000	Pass
5885	12.61	0.0182	16.33	0.0430	30.00	1.0000	Pass
est Mode	IEEE 802.11a	v (UE20) Ant			Tested Date	2023/1/10	2
est Mode	ILLE 802.TTA	X (11E20)_AIII	. 2		resieu Daie	2023/1/10	5
est Frequency	Conducted	Conducted	E.I.R.P.	E.I.R.P.	E.I.R.P. Limit	FIRPLimit	
(MHz)	Power (dBm)	Power (W)	(dBm)	(W)	(dBm)	(W)	Result
5845	13.41	0.0219	17.13	0.0516	30.00	1.0000	Pass
5865	13.45	0.0221	17.17	0.0521	30.00	1.0000	Pass
5885	13.18	0.0208	16.90	0.0490	30.00	1.0000	Pass
0000	10.10	0.0200	10.00	0.0.00	00.00	110000	1 400
	•						
Test Mode	IEEE 802.11a	x (HE20)_Tota	al		Tested Date	2023/1/10	6
· , =		0 1 1	E + D D	LEIDD	le i p p i : :/i		
est Frequency		Conducted	E.I.R.P.	E.I.R.P.	E.I.R.P. Limit		Result
(MHz)	Power (dBm)	Power (W)	(dBm)	(W)	(dBm)	(W)	
5845	16.22	0.0418	19.94	0.0985	30.00	1.0000	Pass
5865	16.17	0.0414	19.89	0.0974	30.00	1.0000	Pass
5885	15.91	0.0390	19.63	0.0919	30.00	1.0000	Pass
Test Mode	IEEE 802.11a	x (HE40)_Ant	. 1		Tested Date	2023/1/10	6
est Frequency		Conducted	E.I.R.P.	E.I.R.P.	E.I.R.P. Limit		Result
(MHz)	Power (dBm)	Power (W)	(dBm)	(W)	(dBm)	(W)	
5835	15.09	0.0323	18.81	0.0760	30.00	1.0000	Pass
5875	15.29	0.0338	19.01	0.0796	30.00	1.0000	Pass
est Mode	IEEE 802.11a	x (HE40)_Ant	. 2		Tested Date	2023/1/10	 6
est Mode	IEEE 802.11a	x (HE40)_Ant	. 2				6
est Frequency	Conducted	Conducted	. 2 E.I.R.P.	E.I.R.P.	E.I.R.P. Limit		
		, ,–		E.I.R.P. (W)			
est Frequency (MHz) 5835	Conducted	Conducted Power (W) 0.0319	E.I.R.P.		E.I.R.P. Limit	E.I.R.P. Limit (W) 1.0000	
est Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	E.I.R.P. (dBm)	(W)	E.I.R.P. Limit (dBm)	E.I.R.P. Limit (W)	Result
est Frequency (MHz) 5835	Conducted Power (dBm) 15.04	Conducted Power (W) 0.0319	E.I.R.P. (dBm) 18.76	(W) 0.0752	E.I.R.P. Limit (dBm) 30.00	E.I.R.P. Limit (W) 1.0000	Result Pass
Test Frequency (MHz) 5835 5875	Conducted Power (dBm) 15.04 14.77	Conducted Power (W) 0.0319 0.0300	E.I.R.P. (dBm) 18.76 18.49	(W) 0.0752	E.I.R.P. Limit (dBm) 30.00 30.00	E.I.R.P. Limit (W) 1.0000 1.0000	Result Pass Pass
Test Frequency (MHz) 5835 5875	Conducted Power (dBm) 15.04	Conducted Power (W) 0.0319 0.0300	E.I.R.P. (dBm) 18.76 18.49	(W) 0.0752	E.I.R.P. Limit (dBm) 30.00	E.I.R.P. Limit (W) 1.0000	Result Pass Pass
est Frequency (MHz) 5835 5875	Conducted Power (dBm) 15.04 14.77	Conducted Power (W) 0.0319 0.0300 x (HE40)_Total	E.I.R.P. (dBm) 18.76 18.49	(W) 0.0752 0.0706	E.I.R.P. Limit (dBm) 30.00 30.00 Tested Date	E.I.R.P. Limit (W) 1.0000 1.0000	Result Pass Pass
Test Frequency (MHz) 5835 5875  Test Mode  Test Frequency	Conducted Power (dBm) 15.04 14.77	Conducted Power (W) 0.0319 0.0300  x (HE40)_Total	E.I.R.P. (dBm) 18.76 18.49	(W) 0.0752 0.0706	E.I.R.P. Limit (dBm) 30.00 30.00 Tested Date  E.I.R.P. Limit	E.I.R.P. Limit (W) 1.0000 1.0000 2023/1/10	Result Pass Pass
Test Frequency (MHz) 5835 5875  Test Mode  Test Frequency (MHz)	Conducted Power (dBm) 15.04 14.77 IEEE 802.11a Conducted Power (dBm)	Conducted Power (W) 0.0319 0.0300  x (HE40)_Tota  Conducted Power (W)	E.I.R.P. (dBm) 18.76 18.49	(W) 0.0752 0.0706	E.I.R.P. Limit (dBm) 30.00 30.00 Tested Date  E.I.R.P. Limit (dBm)	E.I.R.P. Limit (W) 1.0000 1.0000 2023/1/10 E.I.R.P. Limit (W)	Result Pass Pass  Result
5835 5875 Test Mode	Conducted Power (dBm) 15.04 14.77	Conducted Power (W) 0.0319 0.0300  x (HE40)_Total	E.I.R.P. (dBm) 18.76 18.49	(W) 0.0752 0.0706	E.I.R.P. Limit (dBm) 30.00 30.00 Tested Date  E.I.R.P. Limit	E.I.R.P. Limit (W) 1.0000 1.0000 2023/1/10	Result Pass Pass



Test Mode	IEEE 802.11a	x (HE80)_Ant	. 1		Tested Date	2023/1/1	6
Foot From to a co	Canduatad	Conducted	T I D D	LLDD	E I D D Limsit	E I D D Limsit	
Test Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	E.I.R.P. (dBm)	E.I.R.P. (W)	E.I.R.P. Limit (dBm)	(W)	Result
5855	14.32	0.0270	18.04	0.0637	30.00	1.0000	Pass
est Mode	IEEE 802.11a	x (HE80)_Ant	. 2		Tested Date	2023/1/1	6
					•		
est Frequency		Conducted	E.I.R.P.	E.I.R.P.	E.I.R.P. Limit		Result
(MHz)	Power (dBm)	Power (W)	(dBm)	(W)	(dBm)	(W)	
5855	14.63	0.0290	18.35	0.0684	30.00	1.0000	Pass
Test Mode	IEEE 802.11a	x (HE80)_Tota	al		Tested Date	2023/1/1	6
est Frequency		Conducted	E.I.R.P.	E.I.R.P.	E.I.R.P. Limit		Result
(MHz)	Power (dBm)	Power (W)	(dBm)	(W)	(dBm)	(W)	
5855	17.49	0.0561	21.21	0.1321	30.00	1.0000	Pass
Test Mode	IEEE 802.11a	x (HE160)_Ar	nt. 1		Tested Date	2023/1/1	6
		,			1		
Test Frequency		Conducted	E.I.R.P.	E.I.R.P.	E.I.R.P. Limit	E.I.R.P. Limit	Result
(MHz)	Power (dBm)	Power (W)	(dBm)	(W)	(dBm)	(W)	
5815	13.09	0.0204	16.81	0.0480	30.00	1.0000	Pass
Test Mode	IEEE 802.11a	x (HE160)_Ar	nt. 2		Tested Date	2023/1/1	6
					•		
Test Frequency	Conducted	Conducted	E.I.R.P.	E.I.R.P.	E.I.R.P. Limit	E.I.R.P. Limit	Result
(MHz)	Power (dBm)	Power (W)	(dBm)	(W)	(dBm)	(W)	
5815	13.61	0.0230	17.33	0.0541	30.00	1.0000	Pass
Test Mode	IEEE 802.11a	x (HE160) To	tal		Tested Date	2023/1/1	 6
		(				_ 3_3, ./ 1	-
Test Frequency	Conducted	Conducted	E.I.R.P.	E.I.R.P.	E.I.R.P. Limit	E.I.R.P. Limit	D 1
(MHz)	Power (dBm)	Power (W)	(dBm)	(W)	(dBm)	(W)	Result
<u> </u>							

# **End of Test Report**

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