



# TEST REPORT



Applicant	Particle Industries, Inc
Address	325 9th Street, San Francisco, CA 94103, United States Of America

Manufacturer or Supplier	Particle Industries, Inc
Address	325 9th Street, San Francisco, CA 94103, United States Of America
Product	Photon 2
Brand Name	Particle
Model	PHN2
Additional Model & Model Difference	N/A
Date of tests	Oct. 27, 2022 ~ Nov. 07, 2022

The tests have been carried out according to the requirements of the following standard:

- Canada RSS-247 Issue 2 (2017-02)
- Canada RSS-Gen Issue 5 (2021-02)

**CONCLUSION: The submitted sample was found to COMPLY with the test requirement**

Tested by Lucas Chen Project Engineer / EMC Department	Approved by Glyn He Assistant Manager / EMC Department
	
	Date: Mar. 20, 2023

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## TABLE OF CONTENTS

<b>RELEASE CONTROL RECORD .....</b>	<b>3</b>
<b>1 SUMMARY OF TEST RESULTS.....</b>	<b>4</b>
<b>2 MEASUREMENT UNCERTAINTY .....</b>	<b>4</b>
<b>3 GENERAL INFORMATION .....</b>	<b>5</b>
3.1 GENERAL DESCRIPTION OF EUT .....	5
3.2 DESCRIPTION OF TEST MODES .....	7
3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL.....	9
3.3 DESCRIPTION OF SUPPORT UNITS .....	10
3.4 GENERAL DESCRIPTION OF APPLIED STANDARDS .....	10
<b>4. TEST TYPES AND RESULTS.....</b>	<b>11</b>
4.1 RADIATED EMISSION .....	11
4.1.1 LIMITS OF RADIATED EMISSION.....	11
4.1.2 TEST INSTRUMENTS.....	12
4.1.3 TEST PROCEDURES .....	13
4.1.4 DEVIATION FROM TEST STANDARD .....	13
4.1.5 TEST SETUP.....	14
4.1.6 EUT OPERATING CONDITION .....	15
4.1.7 TEST RESULTS .....	16
4.2 CONDUCTED EMISSION MEASUREMENT .....	18
4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT .....	18
4.2.2 TEST INSTRUMENTS.....	18
4.2.3 TEST PROCEDURES .....	18
4.2.4 DEVIATION FROM TEST STANDARD .....	19
4.2.5 TEST SETUP.....	19
4.2.6 EUT OPERATING CONDITIONS.....	19
4.2.7 TEST RESULTS .....	20
<b>5 PHOTOGRAPHS OF THE TEST CONFIGURATION.....</b>	<b>22</b>
<b>6 APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB .....</b>	<b>23</b>



**BUREAU  
VERITAS**

Test Report No.: IC2209WDG0276-3

## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
IC2202WDG0092-3	Original release	May 19, 2022
IC2209WDG0276-3	Based on the original report IC2202WDG0092-3, changed the applicant/manufacture address, product name, model number and added the debugging base, it needed to be retested conducted emission and radiated emission (below 1GHz) after engineer evaluated.	Mar. 20, 2023



## 1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: RSS-247, RSS-Gen			
Standard Section	Test Type and Limit	Result	Remark
RSS-Gen			
8.8	AC Power Conducted Emission	PASS	Meet the requirement of limit
8.9 Table 5	Transmitter Radiated Emissions (Below 1GHz)	PASS	Meet the requirement of limit

## 2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	9kHz~30MHz	3.05dB
Radiated emissions	9KHz ~ 30MHz	2.16dB
	30MHz ~ 1GMHz	3.82dB

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



### 3 GENERAL INFORMATION

#### 3.1 GENERAL DESCRIPTION OF EUT

<b>PRODUCT</b>	Photon 2
<b>BRAND</b>	Particle
<b>MODEL NO.</b>	PHN2
<b>ADDITIONAL MODEL</b>	N/A
<b>IC ID</b>	20127-P2
<b>POWER SUPPLY</b>	5.0Vdc (Adapter) 3.7Vdc (Li-ion, Battery)
<b>MODULATION TYPE</b>	256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM
<b>MODULATION TECHNOLOGY</b>	OFDM
<b>TRANSFER RATE</b>	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to 150Mbps 802.11ac : up to 200.0Mbps
<b>OPERATING FREQUENCY</b>	5180 ~ 5240MHz, 5260 ~ 5320MHz 5500 ~ 5700MHz, (without open 5600~5650MHz) 5745 ~ 5825MHz
<b>NUMBER OF CHANNEL</b>	5180 ~ 5240MHz: 4 channels for 802.11a, 802.11n,11ac (20MHz) 2 channels for 802.11n,11ac (40MHz): 5260 ~ 5320MHz: 4 channels for 802.11a, 802.11n (20MHz) 2 channels for 802.11n, 11ac (40MHz) 5500 ~ 5700MHz: 8 channels for 802.11a, 802.11n (20MHz) 3 channels for 802.11n (40MHz) 5745 ~ 5825MHz: 5 channels for 802.11a, 802.11n,11ac (20MHz) 2 channels for 802.11n,11ac (40MHz)
<b>CONDUCTED OUTPUT POWER</b>	81.283mW for 5180 ~ 5240MHz (Maximum AVG Power) 81.658mW for 5260 ~ 5320MHz (Maximum AVG Power) 97.949mW for 5500 ~ 5700MHz (Maximum AVG Power) 91.411mW for 5745 ~ 5825MHz (Maximum AVG Power)
<b>ANTENNA TYPE</b>	5180 ~ 5240MHz: PCB antenna with 1.28dBi gain External PCB Antenna with -0.32dBi gain 5260 ~ 5320MHz: PCB antenna with 1.60dBi gain External PCB Antenna with -0.08dBi gain 5500 ~ 5700MHz: (without open 5600~5650MHz) PCB antenna with 1.74dBi gain External PCB Antenna with 0.87dBi gain 5745 ~ 5825MHz: PCB antenna with 1.21dBi gain External PCB Antenna with 1.26dBi gain
<b>DATA CABLE</b>	N/A



**NOTES:**

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. Please refer to the EUT photo document (Reference No.: 2209WDG0276-1) for detailed product photo.
3. The Photon 2 uses two antennas, but couldn't transmit simultaneously, the antenna type and gain are different, and the antenna port is the same, so the RF conducted output power is the same.

EIRP (Band 1 only), PSD (Band 1 only), radiated emission and conducted emission have been evaluated for both antennas respectively, EIRP (Band 1 only) data and PSD (Band 1 only) data for both antennas are shown in the report, but only the worst antenna data (PCB antenna) is shown in the test report for the radiation spurious emission test and conducted emission.

4. The EUT provides completed transmitters and receivers, the EUT uses only one antenna at any time.

MODULATION MODE	TX FUNCTION
802.11a	1TX/1RX
802.11n (HT20) 802.11ac (VHT20)	1TX/1RX
802.11n (HT40) 802.11ac (VHT40)	1TX/1RX

\* The modulation and bandwidth are similar for 802.11n mode for HT20 / HT40 and 802.11ac mode for VHT20 / VHT40, therefore investigated worst case for final test were chosen 802.11n (HT20/HT40) and record in the report.

5. Conformity Assessment Body Identifier (CABID): CN0026



### 3.2 DESCRIPTION OF TEST MODES

#### FOR 5150 ~ 5250MHz

4 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
36	5180 MHz	40	5200 MHz
44	5220 MHz	48	5240 MHz

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190 MHz	46	5230 MHz

#### FOR 5250 ~ 5350MHz

4 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
52	5260 MHz	56	5280 MHz
60	5300 MHz	64	5320 MHz

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
54	5270 MHz	62	5310 MHz



**FOR 5470 ~ 5725MHz**

8 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
100	5500 MHz	104	5520 MHz
108	5540 MHz	112	5560 MHz
116	5580 MHz	132	5660 MHz
136	5680 MHz	140	5700 MHz

3 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
102	5510 MHz	110	5550 MHz
134	5670 MHz	--	--

**FOR 5725 ~ 5850MHz**

5 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
149	5745MHz	153	5765MHz
157	5785MHz	161	5805MHz
165	5825MHz	--	--

2 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
151	5755MHz	159	5795MHz





### 3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE≥1G	RE<1G	PLC	APCM	
A	-	√	√	-	Powered by DC 5V from Notebook with wifi(5G) link

Where **RE≥1G**: Radiated Emission above 1GHz      **RE<1G**: Radiated Emission below 1GHz  
**PLC**: Power Line Conducted Emission      **APCM**: Antenna Port Conducted Measurement

**NOTE:**  
The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **X-plane**.  
**NOTE:** "-" means no effect.

#### RADIATED EMISSION TEST (BELOW 1GHz):

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11a	5150-5250 5470-5725 5725-5850	36 to 48 100 to 140 149 to 165	36	OFDM	BPSK	6.0

#### POWER LINE CONDUCTED EMISSION TEST:

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11a	5150-5250 5470-5725 5725-5850	36 to 48 100 to 140 149 to 165	36	OFDM	BPSK	6.0

#### TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE<1G	25deg. C, 55%RH	DC 5V from Notebook	Stalker
PLC	25deg. C, 58%RH	DC 5V from Notebook	Summer



### 3.3 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Notebook	DELL	Inspiron 13-7378	GMSJZD2	N/A
2	Serial port tool	N/A	N/A	N/A	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	AC Line: Unshielded, Detachable 0.8m; DC Line: Unshielded, Non-detachable 1.8m; USB Cable: Shielded, Detachable, 0.5m
2	N/A

### 3.4 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

**Canada RSS-247 Issue 2 (2017-02)**

**Canada RSS-Gen Issue 5 (2021-02)**

**ANSI C63.10-2013**

All test items have been performed and recorded as per the above standards.



## 4. TEST TYPES AND RESULTS

### 4.1 RADIATED EMISSION

#### 4.1.1 LIMITS OF RADIATED EMISSION

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table:

FREQUENCIES (MHz)	Magnetic field strength (H-Field) ( $\mu\text{A/m}$ )	MEASUREMENT DISTANCE (meters)
0.009 ~ 0.490	6.37/F (F in kHz)	300
0.490 ~ 1.705	63.7/F (F in kHz)	30
1.705 ~ 30.0	0.08	30

FREQUENCIES (MHz)	FIELD STRENGTH (microvolts/meter)	MEASUREMENT DISTANCE (meters)
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

**NOTES:**

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.



### 4.1.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESU40	100449	Mar. 07, 23
Signal and Spectrum Analyzer	Rohde&Schwarz	FSV7	102331	May 09, 23
Active Loop Antenna (9KHz -30MHz)	SCHWARZBECK	FMZB 1519B	1519B-045	May 20, 23
Amplifier (9KHz -1GHz)	Burgeon	BPA-530	100210	Mar. 13, 23
Bilog Antenna (20MHz -2GHz)	Teseq	CBL 6111D	30643	May 21, 23
Horn Antenna (1GHz -18GHz)	ETS -Lindgren	3117	00062558	May 21, 23
Horn Antenna (18GHz -40GHz)	SCHWARZBECK	BBHA 9170	BBHA9170147	May 14, 23
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	NSEMC003	May 22, 23
Test Software	ADT	ADT_Radiated_V 7.6.15.9.2	N/A	N/A
Broadband Preamplifier (1GHz~18GHz)	SCHWARZBECK	BBV9718	305	May 12, 23
Pre-Amplifier (18GHz-40GHz)	EMCI	EMC 184045	980102	Jan. 10, 23
Test Software	ADT	ADT_Radiated_V 7.6.15.9.2	N/A	N/A
BLUETOOTH TESTER	Rohde&Schwarz	CBT32	100811	N/A

**NOTES:**

1. The test was performed in 966 Chamber. (Chenwu)
2. The calibration interval of the above test instruments are 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
3. The horn antenna is used only for the measurement of emission frequency above 1 GHz if tested.
4. The IC test Site Registration No. is 5936A.



#### 4.1.3 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 1.5 meters (above 1GHz) and 0.8 meters (below 1GHz) above the ground at a 3 meters semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. For below 1GHz was used bilog antenna, and above 1GHz was used horn antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. 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 from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. For below 30MHz, a loop antenna with its vertical plane is place 3m from the EUT and rotated about its vertical axis for maximum response at each azimuth about the EUT. And the centre of the loop shall be 1.3m above the ground.
- g. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, For battery operated equipment, the equipment tests shall be perform using fresh batteries. The turntable was rotated to maximize the emission level.

#### **NOTES:**

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is  $\geq 1/T$  (Duty cycle < 98%) or 10Hz(Duty cycle > 98%) for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

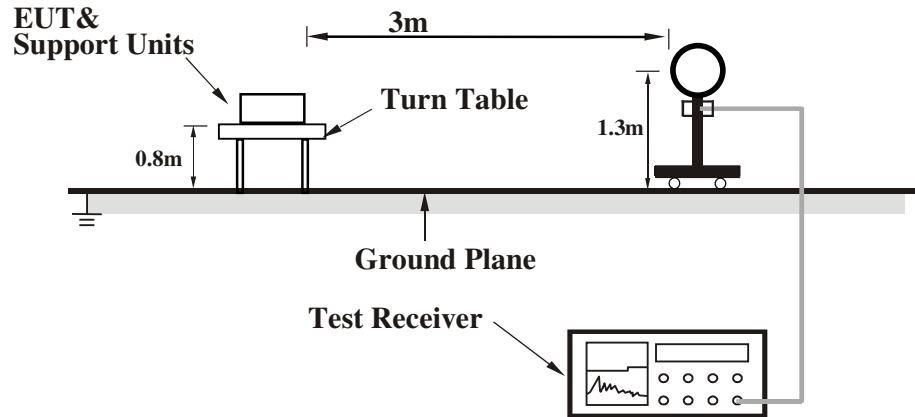
#### 4.1.4 DEVIATION FROM TEST STANDARD

No deviation.

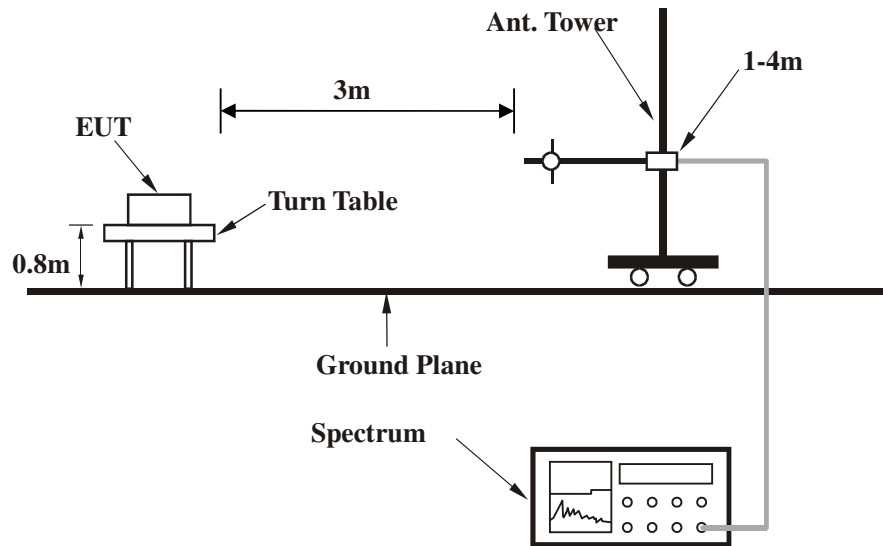


#### 4.1.5 TEST SETUP

##### Below 30MHz test setup



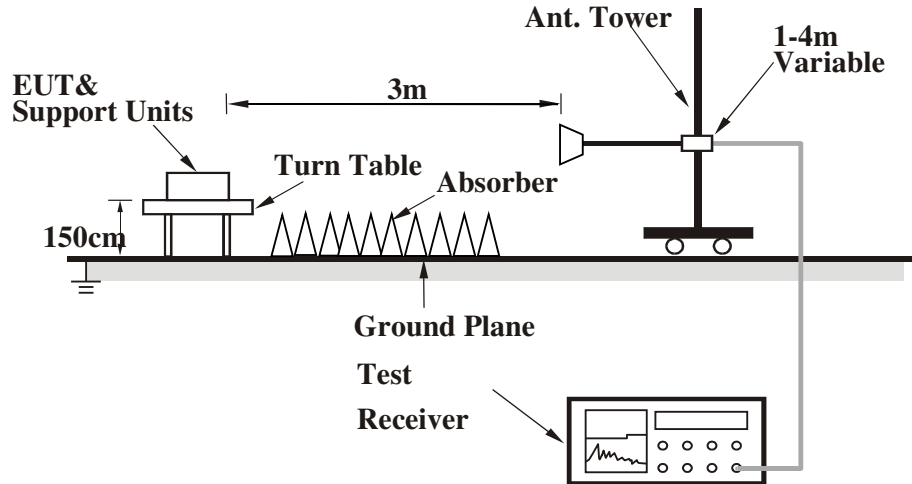
##### Below 1GHz test setup



**Note:** For the actual test configuration, please refer to the attached file (Test Setup Photo).



## Above 1GHz test setup



**Note:** For the actual test configuration, please refer to the attached file (Test Setup Photo).

### 4.1.6 EUT OPERATING CONDITION

- Set the EUT under full load condition and placed them on a testing table.
- Set the transmitter part of EUT under transmission condition continuously at specific channel frequency.
- The necessary accessories enable the EUT in full functions.



4.1.7 TEST RESULTS

BELOW 1GHz DATA (Worst-case PCB Antenna)

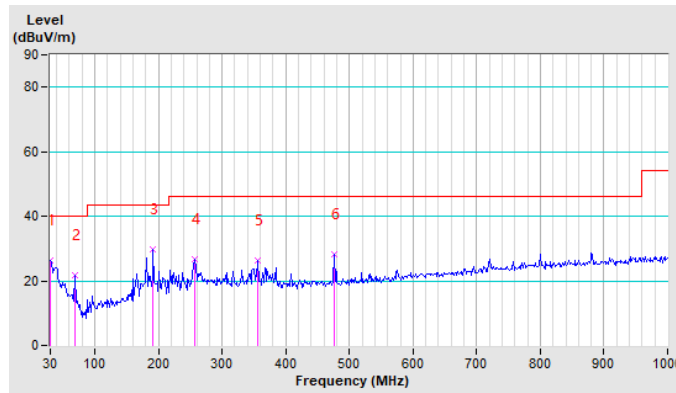
802.11a

<b>CHANNEL</b>	TX Channel 36	<b>DETECTOR FUNCTION</b>	Quasi-Peak (QP)
<b>FREQUENCY RANGE</b>	9KHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	30.00	26.37 QP	40.00	-13.63	2.00 H	322	44.15	-17.78
2	68.86	21.83 QP	40.00	-18.17	2.00 H	341	39.83	-18.00
3	191.67	29.86 QP	43.50	-13.64	2.00 H	359	48.05	-18.19
4	256.96	26.64 QP	46.00	-19.36	2.00 H	56	42.63	-15.99
5	356.44	26.46 QP	46.00	-19.54	2.00 H	44	39.50	-13.04
6	476.14	28.05 QP	46.00	-17.95	2.00 H	6	37.68	-9.63

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. 9KHz~30MHz have been test and test data more than 20dB margin.
5. Margin value = Emission level – Limit value.





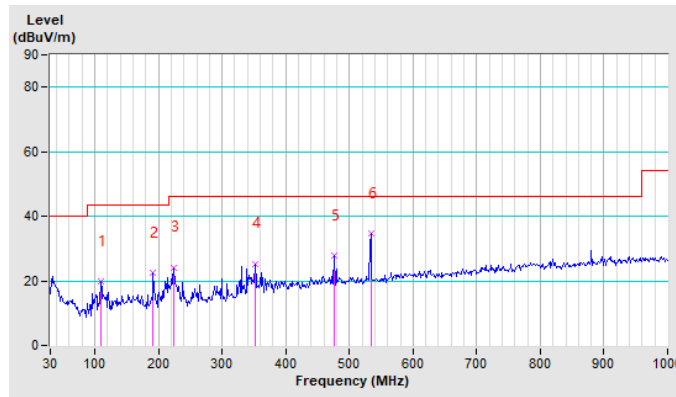


<b>CHANNEL</b>	TX Channel 36	<b>DETECTOR FUNCTION</b>	Quasi-Peak (QP)
<b>FREQUENCY RANGE</b>	9KHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	109.28	19.66 QP	43.50	-23.84	1.00 V	0	38.99	-19.33
2	191.67	22.34 QP	43.50	-21.16	1.00 V	11	40.53	-18.19
3	224.31	24.18 QP	46.00	-21.82	1.00 V	26	41.53	-17.35
4	351.78	25.35 QP	46.00	-20.65	1.00 V	41	38.52	-13.17
5	476.14	27.69 QP	46.00	-18.31	1.00 V	60	37.32	-9.63
6	533.65	34.58 QP	46.00	-11.42	1.00 V	76	43.21	-8.63

**REMARKS:**

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The emission levels of other frequencies were greater than 20dB margin.
4. 9KHz~30MHz have been test and test data more than 20dB margin.
5. Margin value = Emission level – Limit value.





## 4.2 CONDUCTED EMISSION MEASUREMENT

### 4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dBµV)	
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56	56 to 46
0.5 ~ 5	56	46
5 ~ 30	60	50

- NOTES:**
- The lower limit shall apply at the transition frequencies.
  - The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.
  - All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

### 4.2.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR7	101494	Jan. 18,23
Artificial Mains Network	Rohde&Schwarz	ENV216	101173	Jan. 23,23
Artificial Mains Network	Rohde&Schwarz	ESH3-Z5	100317	Jan. 18,23
Voltage probe	SCHWARZBECK	TK 9421	TK 9421-176	Aug. 05,23
Coaxial RF Cable	/	CE CABLE	C2310066DG	Jul. 27,23
Test software	ADT	ADT_Cond_V7.3.7	N/A	N/A

- NOTES:**
- The test was performed in shielded room 553. (Chenwu)
  - The calibration interval of the above test instruments is 12 months. And the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

### 4.2.3 TEST PROCEDURES

- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

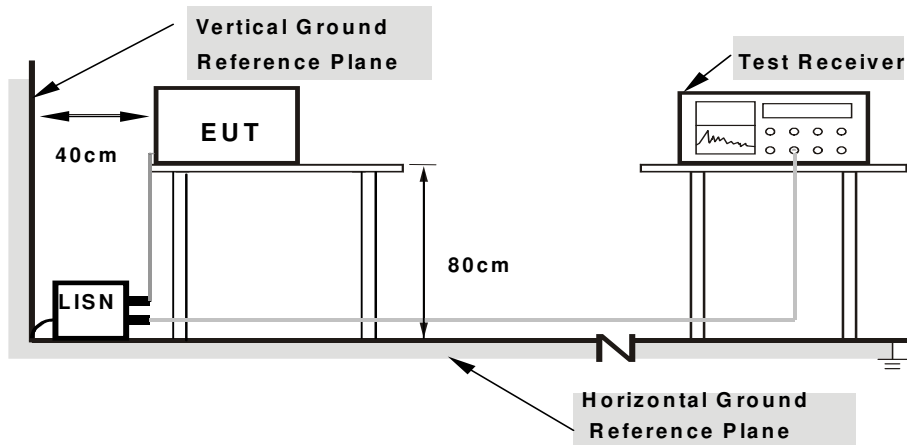
**NOTE:** All modes of operation were investigated and the worst-case emissions are reported.



#### 4.2.4 DEVIATION FROM TEST STANDARD

No deviation.

#### 4.2.5 TEST SETUP



- Note: 1. Support units were connected to second LISN.  
2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes**

For the actual test configuration, please refer to the attached file (Test Setup Photo).

#### 4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6



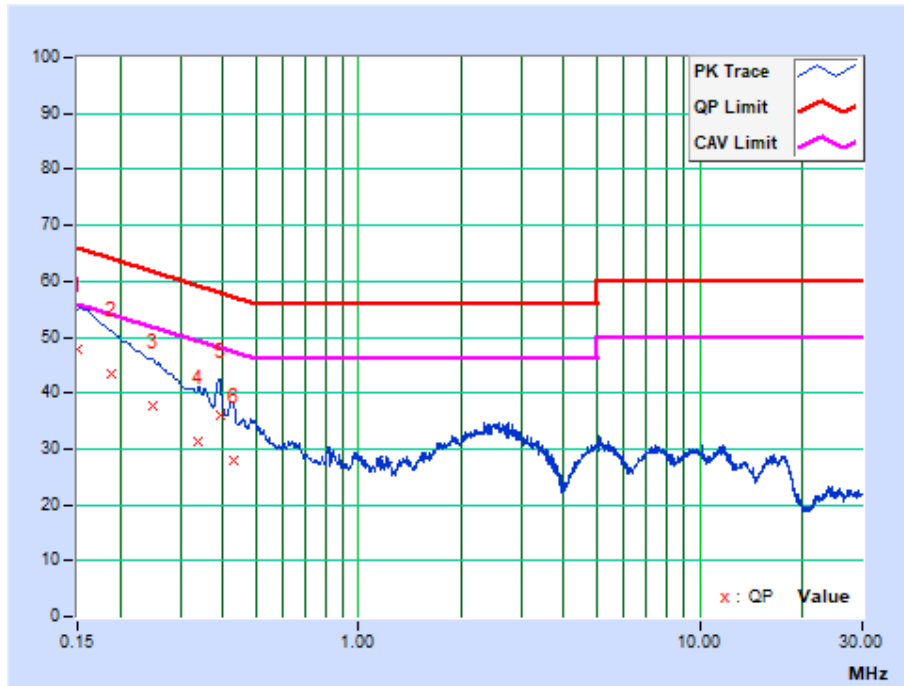
### 4.2.7 TEST RESULTS

**CONDUCTED DATA : 802.11a CH36 (Worst-case PCB Antenna)**

<b>PHASE</b>	Line	<b>6dB BANDWIDTH</b>	9kHz
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.82	38.07	11.48	47.89	21.30	66.00	56.00	-18.11	-34.70
2	0.18825	9.84	33.74	6.54	43.58	16.38	64.11	54.11	-20.54	-37.74
3	0.24900	9.86	27.82	9.19	37.68	19.05	61.79	51.79	-24.11	-32.74
4	0.33885	9.90	21.58	3.74	31.48	13.64	59.23	49.23	-27.76	-35.60
5	0.39300	9.90	26.14	20.66	36.04	30.56	58.00	48.00	-21.96	-17.44
6	0.42900	9.91	17.96	4.94	27.87	14.85	57.27	47.27	-29.40	-32.42

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value = Emission level - Limit value
  5. Correction factor = Insertion loss + Cable loss
  6. Emission Level = Correction Factor + Reading Value.

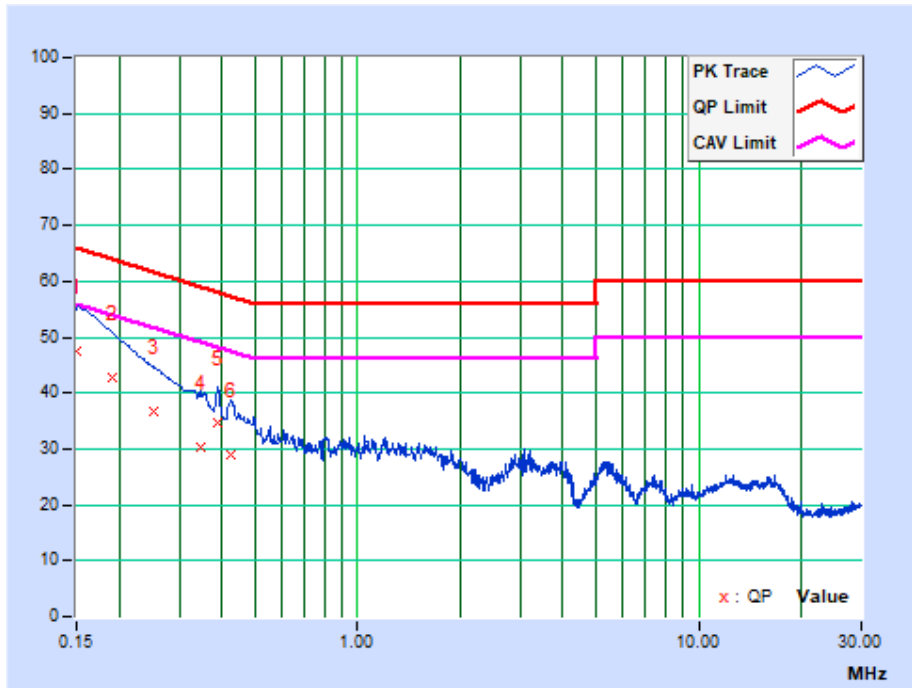




PHASE	Neutral	6dB BANDWIDTH	9kHz
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.76	37.75	12.50	47.51	22.26	66.00	56.00	-18.49	-33.74
2	0.19050	9.77	33.09	9.06	42.86	18.83	64.01	54.01	-21.16	-35.19
3	0.25125	9.79	27.01	8.10	36.80	17.89	61.72	51.72	-24.92	-33.83
4	0.34517	9.80	20.55	5.40	30.35	15.20	59.08	49.08	-28.72	-33.87
5	0.38871	9.80	24.99	23.97	34.79	33.77	58.09	48.09	-23.30	-14.32
6	0.42410	9.81	19.00	6.82	28.81	16.63	57.37	47.37	-28.56	-30.74

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value = Emission level - Limit value
  5. Correction factor = Insertion loss + Cable loss
  6. Emission Level = Correction Factor + Reading Value.





**BUREAU  
VERITAS**

Test Report No.: IC2209WDG0276-3

## 5 PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).



**BUREAU  
VERITAS**

Test Report No.: IC2209WDG0276-3

## **6 APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB**

No modifications were made to the EUT by the lab during the test.

**---END---**