

TEST REPORT

CERTIFICATE OF CONFORMITY

Standards: 47 CFR FCC Part 15, Subpart B, Class B

ANSI C63.4:2014

Report No.: FDBHCP-WTW-P21010420A

Model No: AZ1801

Series Model: CQ-RZ38A0AN, CQ-RZ38A1AN, CQ-RZ38A2AN, CQ-RZ19A0AN,

CQ-RZ19A1AN, CQ-RZ39A0AN, CQ-RZ39A1AN, CQ-RZ39A2AN, CQ-RZ1AA0AN, CQ-RZ1AA1AN, CQ-RZ1AA2AN, CQ-RZ19A2AN, CQ-RZ38A0NT, CQ-RZ38A2NT, CQ-RZ19A0NT, CQ-RZ19A1NT, CQ-RZ19A2NT, CQ-RZ39A0NT, CQ-RZ39A1NT, CQ-RZ39A2NT,

CQ-RZ1AA0NT, CQ-RZ1AA1NT, CQ-RZ1AA2NT, CQ-RZNBA0NT

Received Date: Mar. 10, 2021

Test Date: Mar. 27, 2021 **Issued Date:** Apr. 12, 2021

Applicant: Panasonic Corporation of North America

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Manufacturer: Panasonic Automotive Systems Asia Pacific Co., Ltd.

Manufacture's address: 101 Moo 2 Teparak Rd., T. Bangsaothong, A. Bangsaothong,

Samutprakarn 10570 Thailand

Factory: Panasonic Automotive Systems Asia Pacific Co., Ltd.

Factory's address: 101 Moo 2 Teparak Rd., T. Bangsaothong, A. Bangsaothong,

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

Lin Kou Laboratories

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FCC Registration /

Designation Number: 418586 / TW1078

Approved by: Date:

Jim Hsiang / Associate Technical Manager

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Prepared by: Jessica Cheng / Senior Specialist

This report is for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Unless specific mention, the uncertainty of measurement has been explicitly taken into account to declare the compliance or non-compliance to the specification.

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Release Control Record

Issue No.	Description	Date Issued
FDBHCP-WTW-P21010420A	Original release.	Apr. 12, 2021

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1 Certification

Product: Car Audio

Brand: Panasonic

Test Model: AZ1801

Series Model: CQ-RZ38A0AN, CQ-RZ38A1AN, CQ-RZ38A2AN, CQ-RZ19A0AN,

CQ-RZ19A1AN, CQ-RZ39A0AN, CQ-RZ39A1AN, CQ-RZ39A2AN, CQ-RZ1AA0AN, CQ-RZ1AA1AN, CQ-RZ1AA2AN, CQ-RZ19A2AN, CQ-RZ38A0NT, CQ-RZ38A2NT, CQ-RZ19A0NT, CQ-RZ19A1NT, CQ-RZ19A2NT, CQ-RZ39A1NT, CQ-RZ39A2NT, CQ-RZ1AA0NT, CQ-RZ1AA1NT, CQ-RZ1AA2NT, CQ-RZNBA0NT

Sample Status: Engineering sample

Applicant: Panasonic Corporation of North America

Test Date: Mar. 27, 2021

Standards: 47 CFR FCC Part 15, Subpart B, Class B

ANSI C63.4:2014

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

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2 Summary of Test Results

FCC Part 15 Clause	Test Item	Result/Remarks	Verdict
15.107	Conducted Emissions from input power ports	Without AC power port of the EUT	N/A
15 100	Radiated Emissions up to 1 GHz	Minimum passing Class B margin is -3.06 dB at 145.600 MHz	Pass
15.109	Radiated Emissions above 1 GHz	Minimum passing Class B margin is -16.92 dB at 5585.750 MHz	Pass

Note:

- 1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
- 2. N/A: Not Applicable

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT:

Measurement	Frequency	Expanded Uncertainty (k=2) (±)
Radiated Emissions up to 1 GHz	30MHz ~ 1GHz	5.64 dB
Radiated Emissions above 1 GHz	Above 1GHz	4.96 dB

The other instruments specified are routine verified to remain within the calibrated levels, no measurement uncertainty is required to be calculated.

2.2 Modification Record

There were no modifications required for compliance.

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3 General Information

3.1 Description of EUT

Product	Car Audio
Brand	Panasonic
Test Model	AZ1801
Series Model	CQ-RZ38A0AN, CQ-RZ38A1AN, CQ-RZ38A2AN, CQ-RZ19A0AN, CQ-RZ19A1AN, CQ-RZ39A0AN, CQ-RZ39A1AN, CQ-RZ39A2AN, CQ-RZ1AA0AN, CQ-RZ1AA0AN, CQ-RZ1AA1AN, CQ-RZ1AA2AN, CQ-RZ19A2AN, CQ-RZ38A0NT, CQ-RZ38A2NT, CQ-RZ19A0NT, CQ-RZ19A1NT, CQ-RZ19A2NT, CQ-RZ19A2NT, CQ-RZ1AA0NT, CQ-RZ1AA0NT, CQ-RZ1AA0NT
Model Difference	For marketing difference
Sample Status	Engineering sample
Operating Software	N/A
Power Supply Rating	10Vdc~ 16Vdc
Accessory Device	N/A
Data Cable Supplied	N/A

Note: This report is issued as a supplementary report to the original BV CPS report no.: FD181227C16A. The difference compared with the original report is adding model: CQ-RZNBA0NT for marketing purpose and change LCD part EOL & main PCB reduce size; therefore the EUT is re-tested in this report.

3.2 Primary Clock Frequencies of Internal Source

The highest frequency generated or used within the EUT or on which the EUT operates or tunes is 2.5GHz, provided by Panasonic Corporation of North America, for detailed internal source, please refer to the manufacturer's specifications.

3.3 Features of EUT

The tests reported herein were performed according to the method specified by Panasonic Corporation of North America, for detailed feature description, please refer to the manufacturer's specifications or user's manual.

Please refer to appendix A of the report if the applicant has provided additional descriptions of the EUT.



3.4 Operating Modes of EUT and Determination of Worst Case Operating Mode

Test modes are presented in the report as below.

Mode	Test Condition	Input Power				
	Radiated emission test, 30MHz ~ 1GHz					
1	Bluetooth Link	12Vdc				
2	FM (98MHz)	12Vdc				
	Radiated emission test, 1GHz ~ 6GHz					
1	Bluetooth Link	12Vdc				

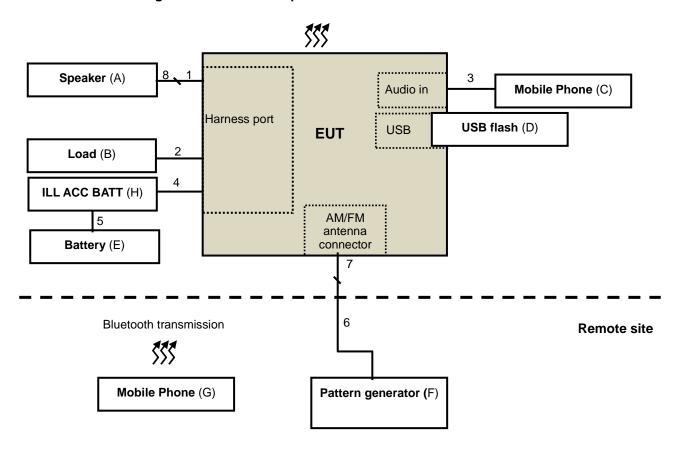
3.5 Test Program Used and Operation Descriptions

- a. Turned on the power of all equipment.
- b. Mobile Phone (kept in a remote area) sent audio signal to the speaker via EUT with Bluetooth transmission.) (For Mode 1)
- c. Pattern generator sent 1 kHz audio signal to the speaker via EUT. (For Mode 2)
- d. Mobile Phone sent audio signal to EUT.
- e. USB flash sent audio signal to EUT.
- f. Steps b-c were repeated.

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3.6 Connection Diagram of EUT and Peripheral Devices





3.7 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
Α.	Speaker	N/A	N/A	N/A	N/A	Supplied by client
B.	LOAD	N/A	N/A	N/A	N/A	Provided by Lab
C.	Mobile Phone	LENOVO	TAB-S8-50LC	N/A	N/A	Provided by Lab
D.	USB flash	SP16G	Mobile C31	N/A	N/A	Provided by Lab
E.	Battery	RISING	SMF NX120-7L	NA	NA	Provided by Lab
F.	Pattern Generator	R&S	SML03	102843	NA	Provided by Lab
G.	Mobile Phone	SAMSUNG	GALAXYS II	NA	NA	Provided by Lab
H.	ILL ACC BATT	NA	NA	NA	NA	Supplied by client

Note:

- 1. All power cords of the above support units are non-shielded (1.8m).
- 2. Items F-G acted as communication partners to transfer data.

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	Audio cable	1	2.2	N	0	Supplied by client
2.	Audio cable	1	2.2	N	0	Supplied by client
3.	Audio cable	1	1.5	N	0	Provided by Lab
4.	DC power cable	1	2.0	N	0	Supplied by client
5.	DC power cable	1	0.5	N	0	Provided by Lab
6.	Coaxial cable	1	10	Υ	0	Provided by Lab
7.	Coaxial cable	1	0.2	Υ	0	Supplied by client
8.	Speaker cable	1	1.5	N	0	Provided by Lab

Note: The core(s) is(are) originally attached to the cable(s).

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4 Test Instruments

The calibration interval of the all test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.1 Radiated Emissions up to 1 GHz

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Agilent Preamplifier	8447D	2944A08118	Feb. 17, 2021	Feb. 16, 2022
Agilent Test Receiver	N9038A	MY50010135	May 29, 2020	May 28, 2021
Schwarzbeck Antenna	VULB9168	9168-434	Nov. 4, 2020	Nov. 3, 2021
Max Full. Turn Table & Tower	MF7802	MF780208103	NA	NA
Software	Radiated_V8.7.08	NA	NA	NA
WOKEN RF cable With 5dB PAD	8D	CABLE-CH7-01	Jan. 19, 2021	Jan. 18, 2022

Note: 1. The test was performed in Chamber No. 7.

2. The VCCI Site Registration No. R-20008.

3. Tested Date: Mar. 27, 2021

4.2 Radiated Emissions above 1 GHz

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Agilent Spectrum	E4446A	MY51100009	Jun. 23, 2020	Jun. 22, 2021
Agilent Test Receiver	N9038A	MY50010135	May 29, 2020	May 28, 2021
EMCI Preamplifier	EMC0126545	980076	Feb. 19, 2021	Feb. 18, 2022
MITEQ Preamplifier	AMF-6F-260400-33-8P	892164	Feb. 19, 2021	Feb. 18, 2022
EMCI Preamplifier	EMC184045B	980235	Feb. 19, 2021	Feb. 18, 2022
ETS Preamplifier	3117-PA	00215857	Nov. 23, 2020	Nov. 22, 2021
Schwarzbeck Horn Antenna	BBHA-9170	212	Nov. 22, 2020	Nov. 21, 2021
EMCO Horn Antenna	3115	9312-4192	Nov. 22, 2020	Nov. 21, 2021
Max Full. Turn Table & Tower	MF7802	MF780208103	NA	NA
Software	Radiated_V8.7.08	NA	NA	NA
SUHNER RF cable With 3/4dB PAD	SF102	Cable-CH7-3.6m	Jul. 9, 2020	Jul. 8, 2021
MICRO-TRONICS Notch filter	BRC50703-01	010	May 29, 2020	May 28, 2021
MICRO-TRONICS Band Pass Filter	BRM17690	005	May 29, 2020	May 28, 2021

Note: 1. The test was performed in Chamber No. 7.

2. The VCCI Site Registration No. G-10039

3. Tested Date: Mar. 27, 2021

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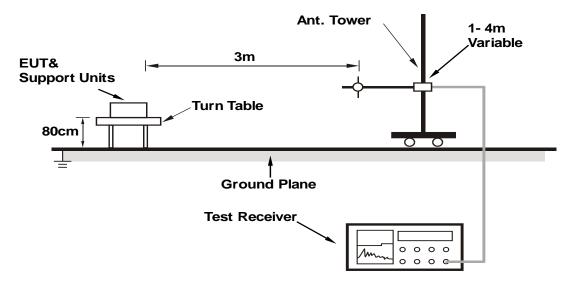


5 Test Arrangement

5.1 Radiated Emissions up to 1 GHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at an accredited test facility. 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. The antenna is a broadband 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 quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is up to 1 GHz.

Note: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for quasi-peak detection (QP) at frequency up to 1GHz.



For the actual test configuration, please refer to the related Item – Photographs of the Test Configuration.

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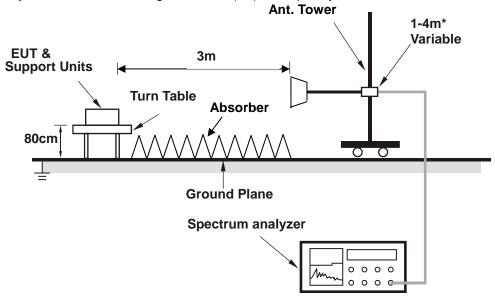
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5.2 Radiated Emissions above 1 GHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at an accredited chamber room. 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. The height of antenna can be varied from one meter to four meters, the height of adjustment depends on the EUT height and the antenna 3dB beamwidth both, to detect 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 and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The spectrum analyzer system was set to peak and average detects function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz.

Note: The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection (PK) at frequency above 1GHz. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz for Average detection (AV) at frequency above 1GHz.



*: depends on the EUT height and the antenna 3dB beamwidth both.

The test arrangement is in accordance with ANSI C63.4:2014. For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

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6 Limits of Emission

6.1 Radiated Emissions up to 1 GHz

Radiated Emissions Limits at 10 meters (dBµV/m)							
Frequencies (MHz)	FCC Part 15B, Class A	FCC Part 15B, Class B	CISPR 22, Class A	CISPR 22, Class B			
30-88	39	29.5					
88-216	43.5	33.1	40	30			
216-230	46.4	35.6					
230-960	40.4	33.0	47	37			
960-1000	49.5	43.5	4/	31			

Radiated Emissions Limits at 3 meters (dBµV/m)							
Frequencies (MHz)	FCC Part 15B, Class A	FCC Part 15B, Class B	CISPR 22, Class A	CISPR 22, Class B			
30-88	49.5	40					
88-216	54	43.5	50.5	40.5			
216-230	56.9	46					
230-960	50.9	40	57.5	47.5			
960-1000	60	54	57.5	47.5			

Notes: 1. The lower limit shall apply at the transition frequencies.

6.2 Radiated Emissions above 1 GHz

Frequency Range (For unintentional radiators)

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30
1.705-108	1000
108-500	2000
500-1000	5000
Above 1000	5th harmonic of the highest frequency or 40GHz, whichever is lower

Radiated Emissions Limits at 3 meters (dBµV/m)						
Frequency range Class A Class B						
Above 1CHz	Avg: 60	Avg: 54				
Above 1GHz	Peak: 80	Peak: 74				

Notes: 1. These limit levels apply for a measurement distance of 3 m. If using a different measurement distance, the measured levels shall be extrapolated to the 3 m limit distance using a factor of 20 dB per decade of distance. The measurement distance shall place the measurement antenna in the far field of the ITE or digital apparatus under test.

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7 Test Results of Emission

7.1 Radiated Emissions up to 1 GHz

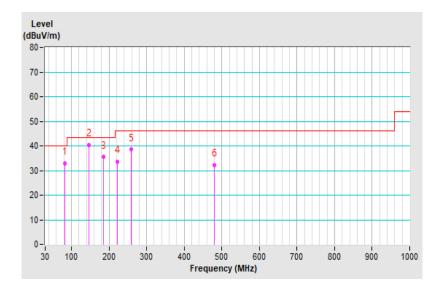
7.1.1 Test Mode 1

Frequency Range	30MHz ~ 1GHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP), 120kHz
Input Power	12Vdc	Environmental Conditions	23.0℃, 67.0%RH
Tested By	Chin-Wen Wang	Test Date	2021/3/27
Test Mode	Mode 1		

	Antenna Polarity & Test Distance : Horizontal at 3 m									
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)		
1	82.016	32.99 QP	40.00	-7.01	2.17 H	258	45.14	-12.15		
2	145.600	40.44 QP	43.50	-3.06	2.41 H	19	48.08	-7.64		
3	184.303	35.48 QP	43.50	-8.02	1.74 H	132	44.25	-8.77		
4	221.187	33.69 QP	46.00	-12.31	1.00 H	289	43.47	-9.78		
5	258.047	38.54 QP	46.00	-7.46	1.00 H	59	45.67	-7.13		
6	479.231	32.36 QP	46.00	-13.64	1.00 H	308	33.95	-1.59		

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)
 - Pre-Amplifier Factor (dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission level Limit value



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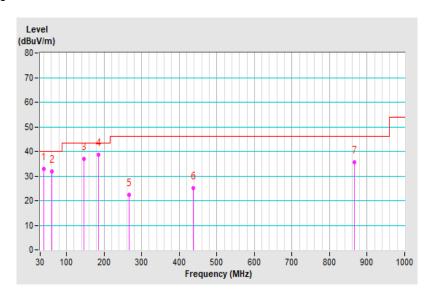


Frequency Range	30MHz ~ 1GHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP), 120kHz
Input Power	12Vdc	Environmental Conditions	23.0℃, 67.0%RH
Tested By	Chin-Wen Wang	Test Date	2021/3/27
Test Mode	Mode 1		

	Antenna Polarity & Test Distance : Vertical at 3 m									
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)		
1	39.554	33.04 QP	40.00	-6.96	2.75 V	219	41.83	-8.79		
2	60.458	31.82 QP	40.00	-8.18	1.17 V	258	40.35	-8.53		
3	145.600	37.02 QP	43.50	-6.48	1.27 V	73	44.66	-7.64		
4	184.327	38.58 QP	43.50	-4.92	2.56 V	280	47.35	-8.77		
5	267.262	22.42 QP	46.00	-23.58	2.10 V	298	29.12	-6.70		
6	436.818	25.25 QP	46.00	-20.75	1.00 V	185	27.58	-2.33		
7	867.086	35.71 QP	46.00	-10.29	1.00 V	112	30.09	5.62		

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)
 - Pre-Amplifier Factor (dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission level Limit value



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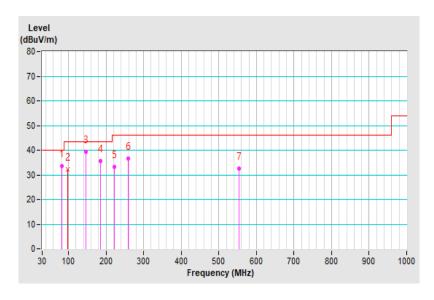
7.1.2 Test Mode 2

Frequency Range	30MHz ~ 1GHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP), 120kHz
Input Power	12Vdc	Environmental Conditions	23.0℃, 67.0%RH
Tested By	Chin-Wen Wang	Test Date	2021/3/27
Test Mode	Mode 2		

	Antenna Polarity & Test Distance : Horizontal at 3 m									
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)		
1	82.259	33.57 QP	40.00	-6.43	2.27 H	82	45.76	-12.19		
2	98.388	32.15 QP	43.50	-11.35	1.07 H	241	44.27	-12.12		
3	145.600	39.24 QP	43.50	-4.26	1.78 H	30	46.88	-7.64		
4	184.303	35.56 QP	43.50	-7.94	1.12 H	123	44.33	-8.77		
5	221.187	33.17 QP	46.00	-12.83	1.00 H	290	42.95	-9.78		
6	258.047	36.76 QP	46.00	-9.24	1.38 H	53	43.89	-7.13		
7	552.927	32.53 QP	46.00	-13.47	1.00 H	360	33.21	-0.68		

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)
 - Pre-Amplifier Factor (dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission level Limit value



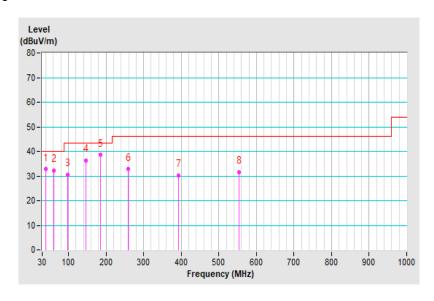


Frequency Range	30MHz ~ 1GHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP), 120kHz
Input Power	12Vdc	Environmental Conditions	23.0℃, 67.0%RH
Tested By	Chin-Wen Wang	Test Date	2021/3/27
Test Mode	Mode 2		

	Antenna Polarity & Test Distance : Vertical at 3 m									
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)		
1	39.506	32.73 QP	40.00	-7.27	1.07 V	358	41.52	-8.79		
2	60.312	32.34 QP	40.00	-7.66	1.56 V	240	40.82	-8.48		
3	98.388	30.65 QP	43.50	-12.85	2.17 V	348	42.77	-12.12		
4	145.600	36.32 QP	43.50	-7.18	1.10 V	73	43.96	-7.64		
5	184.327	38.50 QP	43.50	-5.00	2.41 V	280	47.27	-8.77		
6	258.047	32.74 QP	46.00	-13.26	2.08 V	277	39.87	-7.13		
7	393.556	30.12 QP	46.00	-15.88	1.00 V	154	33.53	-3.41		
8	552.951	31.59 QP	46.00	-14.41	1.00 V	2	32.27	-0.68		

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)
 - Pre-Amplifier Factor (dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission level Limit value





7.2 Radiated Emissions above 1 GHz

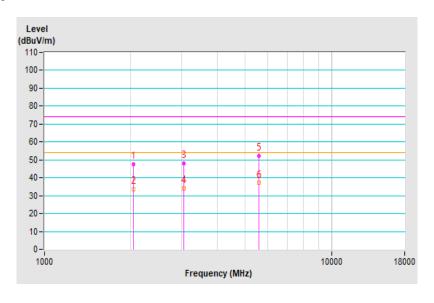
7.2.1 Test Mode 1

Frequency Range	1GHz ~ 12.5GHz	Detector Function & Resolution Bandwidth	Peak (PK) / Average (AV), 1MHz
Input Power	12Vdc	Environmental Conditions	23.0℃, 67.0%RH
Tested By	Chin-Wen Wang	Test Date	2021/3/27
Test Mode	Mode 1		

	Antenna Polarity & Test Distance : Horizontal at 3 m									
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)		
1	2043.375	47.61 PK	74.00	-26.39	2.27 H	163	46.55	1.06		
2	2043.375	33.54 AV	54.00	-20.46	2.27 H	163	32.48	1.06		
3	3054.025	47.94 PK	74.00	-26.06	1.72 H	96	45.33	2.61		
4	3054.025	34.05 AV	54.00	-19.95	1.72 H	96	31.44	2.61		
5	5585.750	52.17 PK	74.00	-21.83	1.34 H	348	45.03	7.14		
6	5585.750	37.08 AV	54.00	-16.92	1.34 H	348	29.94	7.14		

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)
 - Pre-Amplifier Factor (dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission level Limit value



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Reference No.: BHCP-WTW-P21030276



Frequency Range	1GHz ~ 12.5GHz	Detector Function & Resolution Bandwidth	Peak (PK) / Average (AV), 1MHz	
Input Power	12Vdc	Environmental Conditions	23.0℃, 67.0%RH	
Tested By	Chin-Wen Wang	Test Date	2021/3/27	
Test Mode	Mode 1			

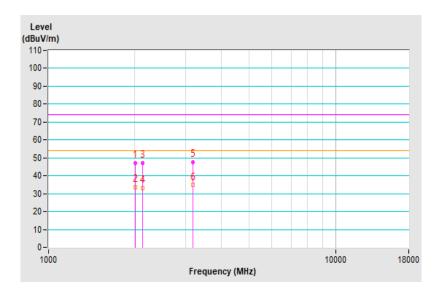
Antenna Polarity & Test Distance : Vertical at 3 m										
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)		
1	2011.075	47.02 PK	74.00	-26.98	2.31 V	2	45.96	1.06		
2	2011.075	33.74 AV	54.00	-20.26	2.31 V	2	32.68	1.06		
3	2121.575	47.14 PK	74.00	-26.86	1.56 V	206	46.38	0.76		
4	2121.575	33.16 AV	54.00	-20.84	1.56 V	206	32.40	0.76		
5	3192.575	47.65 PK	74.00	-26.35	1.20 V	39	44.59	3.06		
6	3192.575	34.79 AV	54.00	-19.21	1.20 V	39	31.73	3.06		

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)

– Pre-Amplifier Factor (dB)

- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission level Limit value



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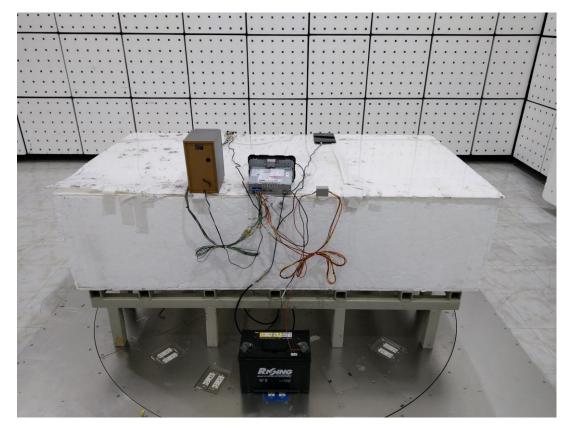
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8 Pictures of Test Arrangements

8.1 Radiated Emissions up to 1 GHz





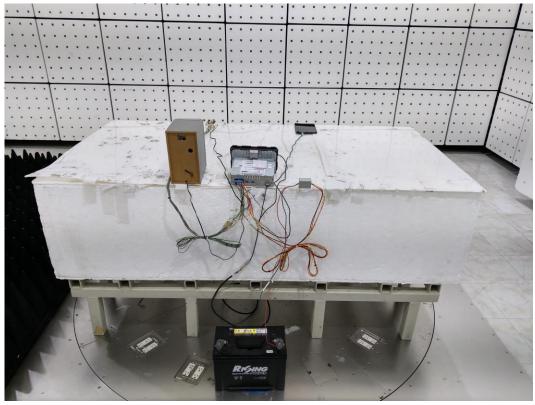
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8.2 Radiated Emissions above 1 GHz







Report Format Version: 7.0.1

9 Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

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Web Site: www.bureauveritas.com

The address and road map of all our labs can be found in our web site also.

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