TEST REPORT

CERTIFICATE OF CONFORMITY

Standards:	**ICES-003:2020 Issue 7, Class A** **ICES-Gen:2018 Issue 1+A1:2021** **ANSI C63.4-2014 amended as per ANSI C63.4a-2017**
Report No.:	CIBDAO-WTW-P21080985
Model No.:	YNEE0750BM
Series Model:	YNEE0750DM, YNEE0750EM
Received Date:	2021/8/25
Test Date:	2021/9/2 ~ 2021/9/6
Issued Date:	2021/10/14
Applicant:	3Y Power Technology (Taiwan) Inc.
Address:	2nd FL 576, 578 Minsheng N RD SEC 1 Gueishan District Taoyuan 333 Taiwan
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Lin Kou Laboratories
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
Test Location:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
FCC Registration / Designation Number:	418586 / TW1078

Approved by : Jim Hsiang , **Date:** 2021/10/14

Jim Hsiang / Associate Technical Manager

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Prepared by : Ivy Lin / Specialist

Certificate #4327.01

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Release Control Record

Issue No.	Description	Date Issued
CIBDAO-WTW-P21080985	Original release.	2021/10/14

1 Certification

Product:	Power Supply
Test Model:	YNEE0750BM
Series Model:	YNEE0750DM, YNEE0750EM
Sample Status:	Engineering sample
Applicant:	3Y Power Technology (Taiwan) Inc.
Test Date:	2021/9/2 ~ 2021/9/6
Standards:	ICES-003:2020 Issue 7, Class A ICES-Gen:2018 Issue 1+A1:2021 ANSI C63.4-2014 amended as per ANSI C63.4a-2017

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.

2 Summary of Test Results

The test items that the EUT needs to perform according to its interfaces and functions evaluation are as follows:

ICES-003 Clause	Test Item	Result/Remarks	Verdict
3.2.1	Conducted Emissions from Power Ports	Minimum passing Class A margin is -16.82 dB at 0.18906 MHz	Pass
3.2.2	Radiated Emissions up to 1 GHz	Minimum passing Class A margin is -17.29 dB at 78.11 MHz	Pass

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

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) (±)
Conducted Emissions from Power Ports	150kHz ~ 30MHz	3.00 dB
Radiated Emissions up to 1 GHz	30MHz ~ 1GHz	4.08 dB

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

2.2 Supplementary Information

There is not any deviation from the test standards for the test method, and no modifications required for compliance.

3 General Information

3.1 Description of EUT

Product	Power Supply
Test Model	YNEE0750BM
Series Model	YNEE0750DM, YNEE0750EM
Model Difference	Refer to note as below
Sample Status	Engineering sample
Operating Software	N/A
Power Supply Rating	Rating: Refer to note as below
Accessory Device	N/A
Data Cable Supplied	N/A

Note:

The EUT is a Power Supply (AC 3-pin) and it has several models, which are identical to each other except for the following:

Model	Power Rating	Difference
YNEE0750BM, YNEE0750DM	AC I/P: 100-240Vac 50-60Hz 10-5A DC O/P: +12Vdc/ 62.5A +5Vsb/ 3A Total DC OUTPUT:765W	AC Inlet: C16
YNEE0750EM		AC Inlet: C14

During the test, **Model: YNEE0750BM, YNEE0750EM** were selected as the representative models for the test.

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 90kHz, provided by 3Y Power Technology (Taiwan) Inc., 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 3Y Power Technology (Taiwan) Inc., for detailed feature description, please refer to the manufacturer's specifications or user's manual.

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

1. The EUT is designed with AC power of rating 100-240Vac, 50-60Hz. For radiated emission evaluation, 110Vac/60Hz & 220Vac/60Hz (for CNS 13438) and 120Vac/60Hz (for FCC Part 15 & ICES-003) had been covered during the pre-test. The worst data was found at **220Vac/60Hz** and recorded in the applied test report.

2. The EUT has been pre-tested under following test modes, and **Mode 1** was the worst case for final test.

Mode	Model	AC Inlet	Test Condition
1	YNEE0750BM	C16	Full load
2	YNEE0750EM	C14	Full load

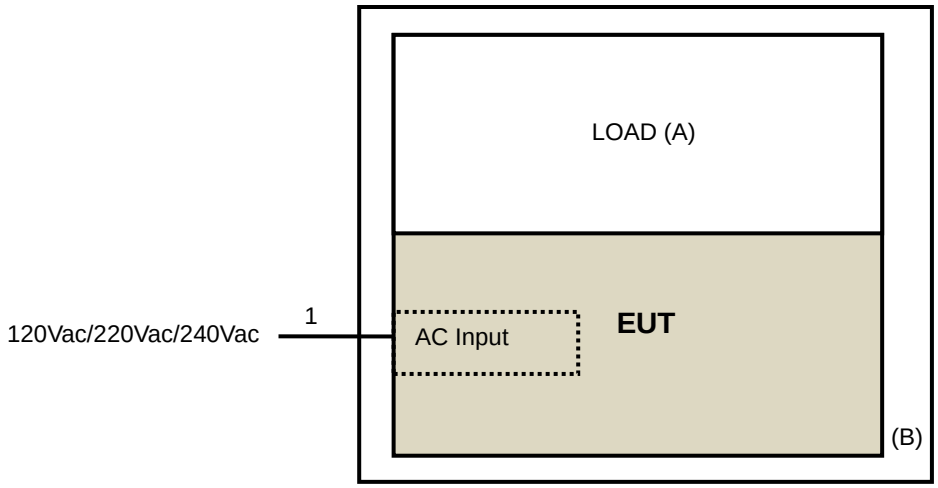
3. Test modes are presented in the report as below.

Mode	Model	AC Inlet	Input power	Test Condition
Conducted emission test				
A 1	YNEE0750BM	C16	120Vac/60Hz	Full load
A 2			240Vac/60Hz	
Radiated emission test				
A	YNEE0750BM	C16	220Vac/ 60Hz	Full load

3.5 Test Program Used and Operation Descriptions

Connected a load with EUT and installed load and EUT into a metal case and then set the EUT under full load.

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
A.	LOAD	N/A	N/A	N/A	N/A	Supplied by client
B.	Metal Case	N/A	N/A	N/A	N/A	Supplied by client

Note: All power cords of the above support units are non-shielded (1.8m).

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	AC power cable	1	1.8	N	0	Provided by Lab

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

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 Conducted Emissions from Power Ports

Description & Manufacturer	Model no.	Serial No.	Calibrated Date	Calibrated Until
Test Receiver R & S	ESCS 30	838251/021	2020/11/3	2021/11/2
LISN R&S	ENV216	101197	2021/6/23	2022/6/22
LISN R&S	ENV216	101195	2021/5/25	2022/5/24
LISN SCHWARZBECK	NNLK8129	8129229	2021/5/20	2022/5/19
DC LISN SCHWARZBECK	NNLK 8121	8121-808	2021/4/18	2022/4/17
LISN SCHWARZBECK	NNLK 8121	8121-731	2021/4/28	2022/4/27
LISN R&S	ENV216	101196	2021/4/26	2022/4/25
LISN EMCO	3825/2	9504-2359	2021/7/27	2022/7/26
LISN R&S	ESH3-Z6	844950/018	2021/7/25	2022/7/24
LISN EMCO	3825/2	9204-1964	2021/5/19	2022/5/18
DC LISN R&S	ESH3-Z6	100219	2021/7/25	2022/7/24
Coupling/Dcoupling Network SCHWARZBECK	CDNE-M2	00097	2021/5/6	2022/5/5
Coupling/Dcoupling Network SCHWARZBECK	CDNE-M3	00091	2021/5/6	2022/5/5
Coupling/Dcoupling Network TESEQ	CDN A201A	44601	2020/12/27	2021/12/26
RF Coaxial Cable Commate	5D-FB	Cable-CO3-01	2020/9/16	2021/9/15
Attenuator STI	STI02-2200-10	NO.3	2020/10/23	2021/10/22
50 ohm terminal LYNICS	0900510	E1-011286	2020/9/16	2021/9/15
50 ohm terminal LYNICS	0900510	E1-011285	2020/9/16	2021/9/15
Isolation Transformer Erika Fiedler	D-65396	017	2020/9/14	2021/9/13
Software BVADT	Cond_V7.3.7.4	NA	NA	NA

Note: 1. The test was performed in Linkou Conduction 03
2. The VCCI Site Registration No. C-10274.
3. Tested Date: 2021/9/6

4.2 Radiated Emissions up to 1 GHz

Description & Manufacturer	Model no.	Serial No.	Calibrated Date	Calibrated Until
Test Receiver Agilent	N9038A	MY50010158	2020/11/10	2021/11/9
Test Receiver Agilent	N9038A	MY51210114	2021/1/22	2022/1/21
Pre_Amplifier Sonoma	310N	352921	2021/2/17	2022/2/16
Pre_Amplifier EMCI	EMC9135	980327	2021/2/18	2022/2/17
TRILOG Broad Band Antenna SCHWARZBECK	VULB 9168	9168-316	2020/11/6	2021/11/5
TRILOG Broad Band Antenna SCHWARZBECK	VULB 9168	9168-317	2020/11/6	2021/11/5
RF Coaxial Cable JYEBAO	LMR-600	Cable-CH8-01	2020/9/25	2021/9/24
RF Coaxial Cable JYEBAO	LMR-600	Cable-CH8-02	2020/11/13	2021/11/12
RF Coaxial Cable Pacific	8D-FB	Cable-CH8-03	2020/9/25	2021/9/24
Turn Table & Tower Max Full.	MF7802	MF7802121	NA	NA
Tower Max Full.	MF7802	MF780208105	NA	NA
Software BVADT	Radiated_V8.7.08	NA	NA	NA

Note: 1. The test was performed in Linkou 10M Chamber (Chamber8). The test site validated date: 2021/8/28(NSA)
2. The VCCI Site Registration No. R-12946.
3. Tested Date: 2021/9/2

5 Limits of Test Items

5.1 Conducted Emissions from Power Ports

Frequency (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	79	66	66 - 56	56 - 46
0.5 - 5.0	73	60	56	46
5.0 - 30.0	73	60	60	50

Notes: 1. The lower limit shall apply at the transition frequencies.
2. The limit decreases linearly with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.

5.2 Radiated Emissions up to 1 GHz

Frequency range (MHz)	Class A (3 m) Quasi-peak dBµV/m	Class A (10 m) Quasi-peak dBµV/m	Class B (3 m) Quasi-peak dBµV/m	Class B (10 m) Quasi-peak dBµV/m
30-88	50.0	40.0	40.0	30.0
88-216	54.0	43.5	43.5	33.1
216-230	56.9	46.4	46.0	35.6
230-960	57.0	47.0	47.0	37.0
960-1000	60.0	49.5	54.0	43.5

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

6 Test Arrangements

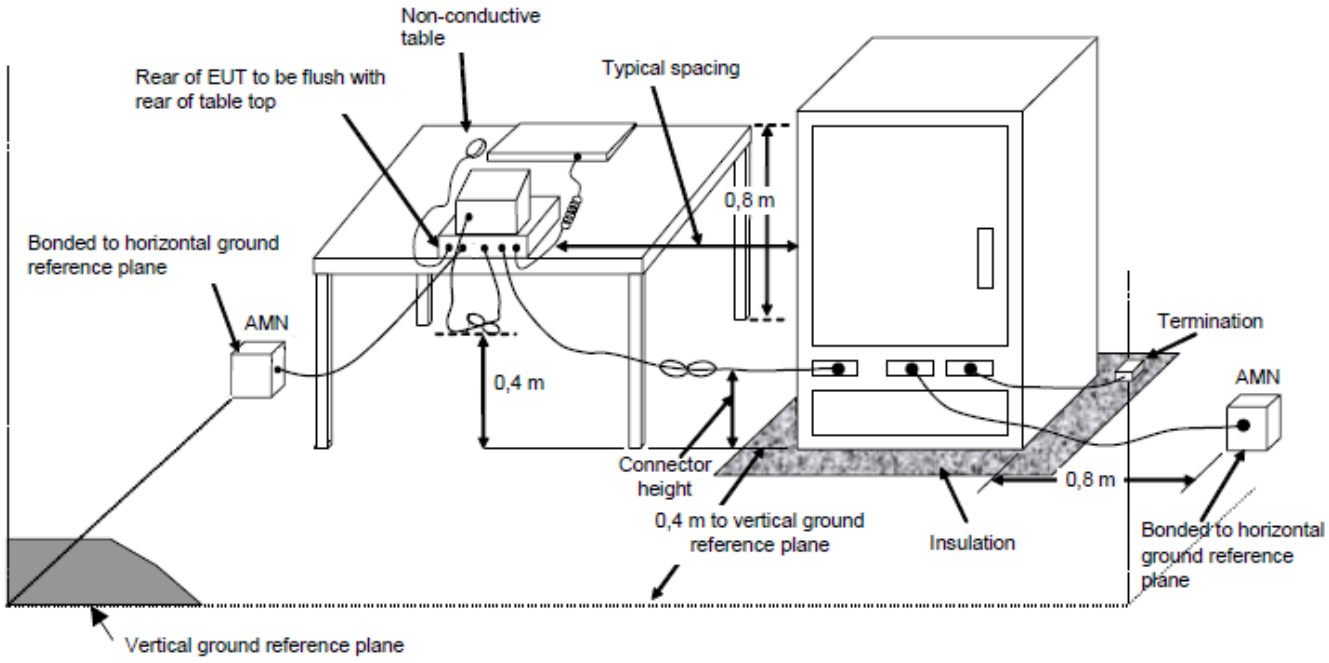
6.1 Conducted Emissions from Power Ports

a. For the table-top EUT is placed on a 0.8 meter to the top of rotating table; for the the floor standing EUT shall be insulated (by insulation of 12 mm) from the horizontal reference ground plane. The EUT is 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 are connected to the power mains through another LISN. They provide coupling impedance for the measuring instrument.

b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

c. The test results of conducted emissions at mains ports are recorded of six worst margins for quasi-peak (mandatory) [and average (if necessary)] values against the limits at frequencies of interest unless the margin is 20 dB or greater.

Note: The resolution bandwidth and video bandwidth of test receiver is 9kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15MHz-30MHz.

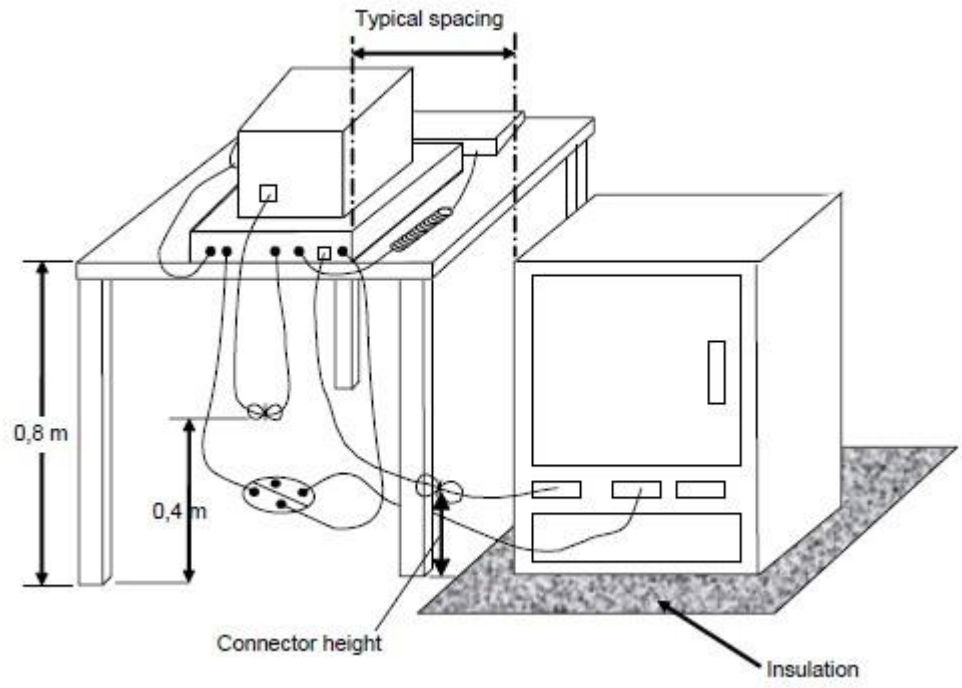


For the actual test configuration, please refer to the related Item – Photographs of the Test Configuration.

6.2 Radiated Emissions up to 1 GHz

a. For the table-top EUT is placed on a 0.8 meter to the top of rotating table; for the the floor standing EUT shall be insulated (by insulation of 12 mm) from the horizontal reference ground plane. The rotating table is rotated 360 degrees to determine the position of the highest radiation. If the equipment requires a dedicated ground connection, this shall be provided and bonded to the RGP.
b. The EUT was set 10 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.

7 Test Results

7.1 Conducted Emissions from Power Ports

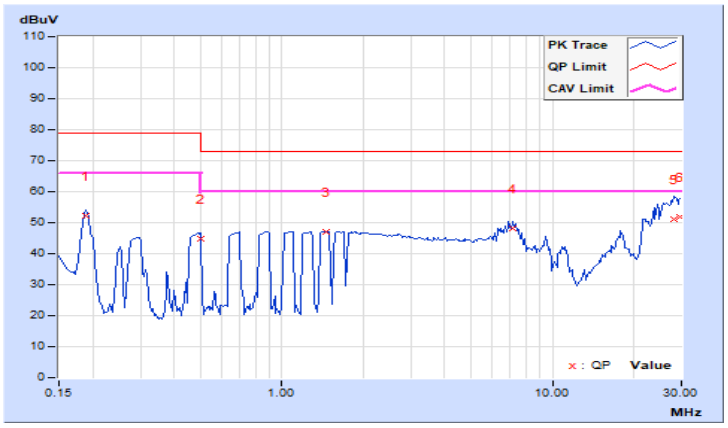
Mode A 1

Frequency Range	150kHz ~ 30MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	**Environmental Conditions**	26 °C, 71% RH, 988 mbar
Tested by	John Liao		

Phase Of Power : Line (L)										
No	**Frequency (MHz)**	**Correction Factor (dB)**	**Reading Value (dBuV)**		**Emission Level (dBuV)**		**Limit (dBuV)**		**Margin (dB)**	
			Q.P.	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**
1	0.18907	9.73	42.36	38.99	52.09	48.72	79.00	66.00	-26.91	-17.28
2	0.50001	9.74	35.12	23.65	44.86	33.39	73.00	60.00	-28.14	-26.61
3	1.45313	9.78	37.23	23.02	47.01	32.80	73.00	60.00	-25.99	-27.20
4	7.09375	9.89	38.26	26.87	48.15	36.76	73.00	60.00	-24.85	-23.24
5	28.11328	9.89	41.16	32.29	51.05	42.18	73.00	60.00	-21.95	-17.82
6	29.73222	9.88	42.06	32.48	51.94	42.36	73.00	60.00	-21.06	-17.64

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

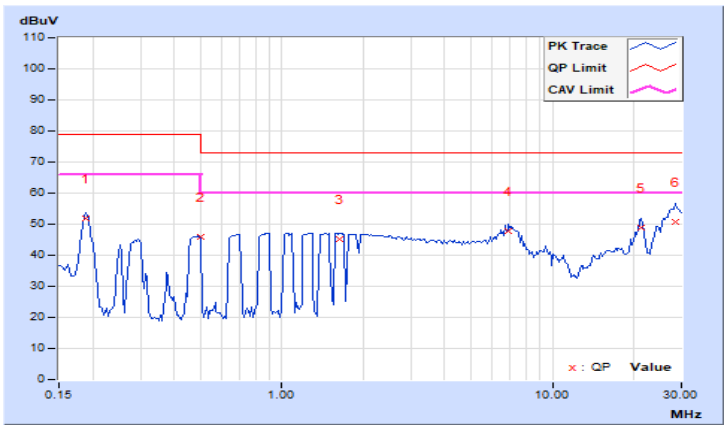


Frequency Range	150kHz ~ 30MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	**Environmental Conditions**	26 °C, 71% RH, 988 mbar
Tested by	John Liao		

Phase Of Power : Neutral (N)										
No	**Frequency (MHz)**	**Correction Factor (dB)**	**Reading Value (dBuV)**		**Emission Level (dBuV)**		**Limit (dBuV)**		**Margin (dB)**	
			Q.P.	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**
1	**0.18906**	**9.71**	**42.12**	**39.47**	**51.83**	**49.18**	**79.00**	**66.00**	**-27.17**	**-16.82**
2	0.50001	9.72	36.32	25.67	46.04	35.39	73.00	60.00	-26.96	-24.61
3	1.64063	9.78	35.23	19.66	45.01	29.44	73.00	60.00	-27.99	-30.56
4	6.89846	9.87	37.85	26.33	47.72	36.20	73.00	60.00	-25.28	-23.80
5	21.41406	9.97	38.99	29.65	48.96	39.62	73.00	60.00	-24.04	-20.38
6	28.37889	9.96	40.62	31.52	50.58	41.48	73.00	60.00	-22.42	-18.52

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



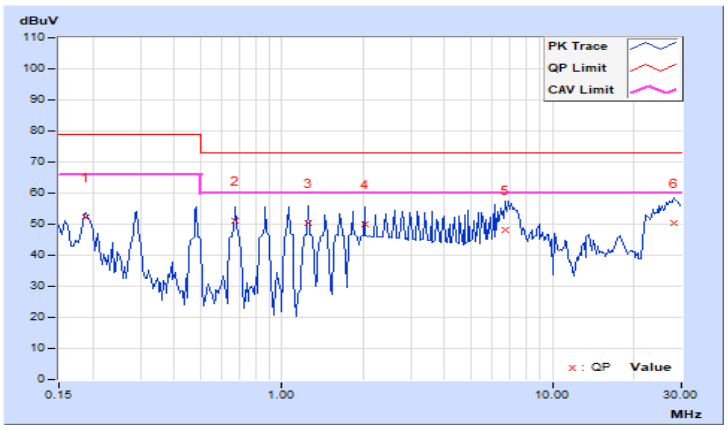
Mode A 2

Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	240Vac, 60Hz	Environmental Conditions	26 °C, 71% RH, 988 mbar
Tested by	John Liao		

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.18906	9.73	42.32	38.11	52.05	47.84	79.00	66.00	-26.95	-18.16
2	0.67345	9.75	41.45	23.99	51.20	33.74	73.00	60.00	-21.80	-26.26
3	1.25127	9.77	40.66	20.16	50.43	29.93	73.00	60.00	-22.57	-30.07
4	2.02344	9.81	40.10	19.32	49.91	29.13	73.00	60.00	-23.09	-30.87
5	6.66406	9.88	38.10	23.08	47.98	32.96	73.00	60.00	-25.02	-27.04
6	28.17969	9.89	40.52	32.25	50.41	42.14	73.00	60.00	-22.59	-17.86

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

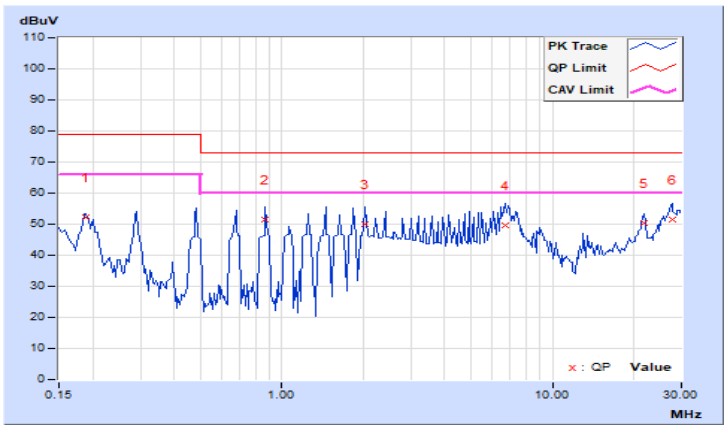


Frequency Range	150kHz ~ 30MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	240Vac, 60Hz	**Environmental Conditions**	26 °C, 71% RH, 988 mbar
Tested by	John Liao		

Phase Of Power : Neutral (N)										
No	**Frequency (MHz)**	**Correction Factor (dB)**	**Reading Value (dBuV)**		**Emission Level (dBuV)**		**Limit (dBuV)**		**Margin (dB)**	
			Q.P.	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**
1	0.18906	9.71	42.35	38.25	52.06	47.96	79.00	66.00	-26.94	-18.04
2	0.86875	9.74	41.66	25.11	51.40	34.85	73.00	60.00	-21.60	-25.15
3	2.02734	9.80	40.23	21.07	50.03	30.87	73.00	60.00	-22.97	-29.13
4	6.66016	9.87	39.65	25.40	49.52	35.27	73.00	60.00	-23.48	-24.73
5	21.80469	9.97	40.50	30.18	50.47	40.15	73.00	60.00	-22.53	-19.85
6	27.70703	9.96	41.35	31.76	51.31	41.72	73.00	60.00	-21.69	-18.28

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



7.2 Radiated Emissions up to 1 GHz

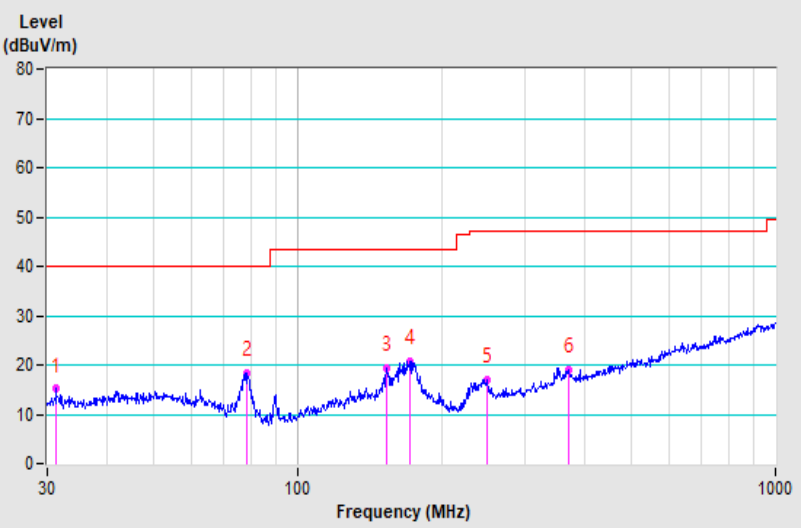
Mode A

Frequency Range	30MHz ~ 1GHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP), 120kHz
Tested By	Perry Yang	**Environmental Conditions**	26 °C, 66% RH

Antenna Polarity & Test Distance : Horizontal at 10 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	31.36	15.11 QP	40.00	-24.89	3.94 H	164	34.29	-19.18
2	78.65	18.33 QP	40.00	-21.67	3.90 H	324	39.78	-21.45
3	154.14	19.28 QP	43.50	-24.22	3.93 H	0	35.43	-16.15
4	171.43	20.84 QP	43.50	-22.66	3.96 H	92	37.49	-16.65
5	248.93	17.06 QP	47.00	-29.94	3.00 H	140	34.41	-17.35
6	368.48	18.95 QP	47.00	-28.05	3.89 H	259	32.77	-13.82

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

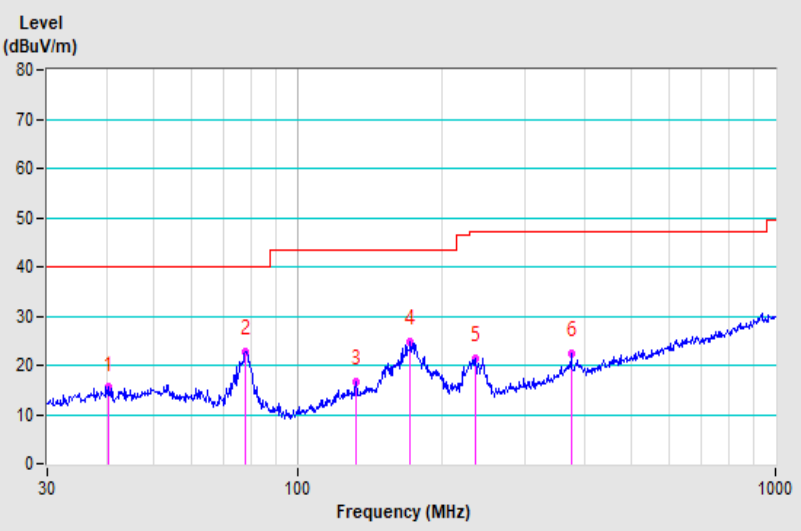


Frequency Range	30MHz ~ 1GHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP), 120kHz
Tested By	Perry Yang	**Environmental Conditions**	26 °C, 66% RH

Antenna Polarity & Test Distance : Vertical at 10 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	40.21	15.45 QP	40.00	-24.55	1.94 V	315	29.51	-14.06
2	**78.11**	**22.71 QP**	**40.00**	**-17.29**	**1.11 V**	**282**	**40.06**	**-17.35**
3	132.70	16.56 QP	43.50	-26.94	1.92 V	332	30.35	-13.79
4	171.57	24.81 QP	43.50	-18.69	1.00 V	9	37.92	-13.11
5	235.98	21.52 QP	47.00	-25.48	1.09 V	142	36.05	-14.53
6	375.03	22.34 QP	47.00	-24.66	1.10 V	69	32.14	-9.80

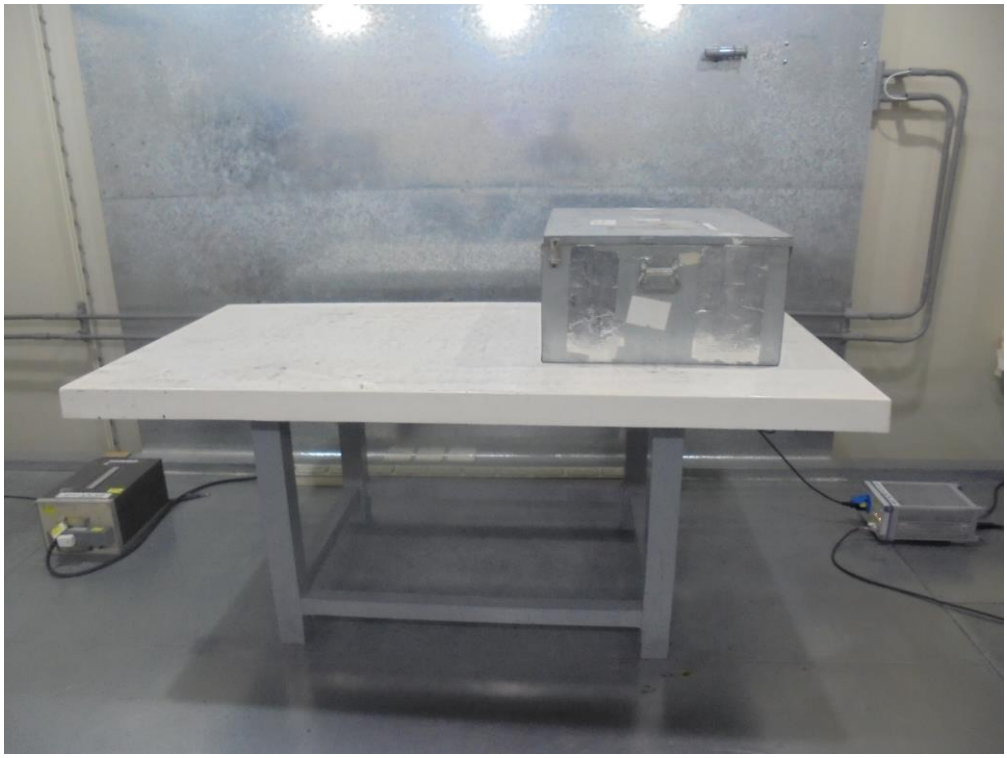
Remarks:

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



8 Pictures of Test Arrangements

8.1 Conducted Emissions from Power Ports



8.2 Radiated Emissions up to 1 GHz

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

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