

FCC Test Report

Report No.: RFBCBS-WTW-P24050227

FCC ID: K7SWIA008V2

Test Model: WIA008V2

Received Date: May 09, 2024

Test Date: May 27, 2024 ~ May 30, 2024

Issued Date: Jun. 27, 2024

Applicant: Belkin International, Inc.

Address: 555 S. Aviation Blvd., Suite 180, El Segundo, CA 90245, USA

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. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City
33383, TAIWAN

FCC Registration / 788550 / TW0003
Designation Number:



This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at <http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/> and is intended 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. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; 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.

Table of Contents

Release Control Record	3
1 Certificate of Conformity	4
2 Summary of Test Results	5
2.1 Measurement Uncertainty	5
2.2 Modification Record	5
3 General Information	6
3.1 General Description of EUT	6
3.2 Description of Test Modes	7
3.2.1 Test Mode Applicability and Tested Channel Detail	8
3.3 Description of Support Units	9
3.3.1 Configuration of System under Test	9
3.4 General Description of Applied Standards	9
4 Test Types and Results	10
4.1 Radiated Emission and Bandedge Measurement	10
4.1.1 Limits of Radiated Emission and Bandedge Measurement	10
4.1.2 Test Instruments	11
4.1.3 Test Procedures	12
4.1.4 Deviation from Test Standard	12
4.1.5 Test Set Up	13
4.1.6 EUT Operating Conditions	13
4.1.7 Test Results	14
4.2 Conducted Emission Measurement	29
4.2.1 Limits of Conducted Emission Measurement	29
4.2.2 Test Instruments	29
4.2.3 Test Procedures	30
4.2.4 Deviation from Test Standard	30
4.2.5 Test Setup	30
4.2.6 EUT Operating Conditions	30
4.2.7 Test Results	31
4.3 20dB Bandwidth Measurement	37
4.3.1 Test SetUp	37
4.3.2 Test Instruments	37
4.3.3 Test Procedure	37
4.3.4 Deviation from Test Standard	37
4.3.5 EUT Operating Conditions	37
4.3.6 Test Results	38
5 Pictures of Test Arrangements	40
Appendix – Information of the Testing Laboratories	41

Release Control Record

Issue No.	Description	Date Issued
RFBCBS-WTW-P23110287	Original release	Jun. 27, 2024

1 Certificate of Conformity

Product: BoostCharge Pro Convertible Magnetic Charging Stand

Brand: belkin

Test Model: WIA008V2

Sample Status: Engineering sample

Applicant: Belkin International, Inc.

Test Date: May 27, 2024 ~ May 30, 2024

Standards: 47 CFR FCC Part 15, Subpart C (Section 15.209)
ANSI C63.10-2013

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 RF characteristics under the conditions specified in this report.

Prepared by : Celine Chou , **Date:** Jun. 27, 2024
Celine Chou / Senior Specialist

Approved by : Jeremy Lin , **Date:** Jun. 27, 2024
Jeremy Lin / Project Engineer

2 Summary of Test Results

47 CFR FCC Part 15, Subpart C (Section 15.209)

FCC Clause	Test Item	Result	Remarks
15.207	AC Power Conducted Emission	Pass	Meet the requirement of limit. Minimum passing margin is -9.97dB at 0.36200MHz.
15.209	Radiated Emission Test	Pass	Meet the requirement of limit. Minimum passing margin is -6.2dB at 42.61MHz

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 as specified in CISPR 16-4-2:

Measurement	Frequency	Expanded Uncertainty (k=2) (±)
Conducted Emissions at mains ports	150kHz ~ 30MHz	2.90 dB
Radiated Emissions up to 1 GHz	9kHz ~ 30MHz	2.44 dB
	30MHz ~ 200MHz	2.93 dB
	200MHz ~ 1000MHz	2.95 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	BoostCharge Pro Convertible Magnetic Charging Stand
Brand	belkin
Test Model	WIA008V2
Sample Status	Engineering sample
Power Supply Rating	5 or 9 or 12 Vdc (adapter)
Modulation Type	FSK
Operating Frequency	127.7kHz for iPhone (8-11 series) 360.0kHz for iPhone (12 series up)
Antenna Type	Coil antenna
Field Strength	360.0kHz: -21.6dBuV/m (PK) (300m) -26.7dBuV/m (AV) (300m) 127.7kHz: -11.5dBuV/m (PK) (300m) -13.0dBuV/m (AV) (300m)
Accessory Device	Refer to Note as below
Data Cable Supplied	Refer to Note as below
Maximum Power Output for Qi2 charging coil	15W
Dimension for Qi2 charging coil	1195mm ² (Diameter=39mm)

Note:

1. The EUT contains following accessory devices.

Item	Brand	Model	Description
Adapter (Option)	belkin	A784-120167C-US1	I/P: 100-240Vac, 50/60Hz, 0.5A O/P: 5Vdc, 3.0A; 9Vdc, 2.23A; 12Vdc, 1.67A; 5-11Vdc, 2.2A, 20W Max.
Type C to Type C USB Cable	CE-Link	UTC-C-5FT-BK-01/ UTC-C-5FT-WH-01	1.5m shielding cable

2. The EUT has two exterior colors: black and white.

3. Due to radiated measurements are made and the antenna gain is already accounted for this device, so provide an antenna datasheet and/or antenna measurement report is not required. The antenna dimensions and pictures (include antenna wire length if have) are stated in EUT photo exhibit.

4. Only radiated measurements are used to show compliance with FCC limits for fundamental and spurious emissions.

3.2 Description of Test Modes

2 Frequency tested to this EUT.

Test Frequency
127.7kHz
360.0kHz

3.2.1 Test Mode Applicability and Tested Channel Detail

EUT configure mode	Applicable to			Description
	RE<1G	PLC	BW	
A	√	√	√	Charging Mode (EUT with iPhone 15) – 360.0kHz
B	√	√	√	Charging Mode (EUT with iPhone 11) – 127.7kHz
C	√	√	-	Standby Mode

Where **RE<1G**: Radiated Emission below 1GHz

PLC: Power Line Conducted Emission

BW: 20dB Bandwidth

- Note:
1. The charging mode has been pre-tested in three modes: 10%, 50% and 90%. After verification, 10% was chosen for final test and presented in the test report.
 2. EUT can be used in the following ways: Standing w/ Charging Pad_Vertical & Horizontal. Pre-scan these ways and find the worst case as a representative test condition. The horizontal was the worst case for final test and presented in the test report.
 3. “-” 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	Tested Frequency
A	360.0kHz
B	127.7kHz
C	-

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	Tested Frequency
A	360.0kHz
B	127.7kHz
C	-

20dB Bandwidth 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	Tested Frequency
A	360.0kHz
B	127.7kHz

Test Condition:

Applicable To	Environmental Conditions	Input Power	Tested by
RE<1G	24 deg. C, 78% RH	120Vac, 60Hz	Vincent Chen
PLC	23 deg. C, 67% RH	120Vac, 60Hz	Adair Peng
BW	24 deg. C, 78% RH	120Vac, 60Hz	Vincent Chen

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.

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Adapter	belkin	A784-120167C-US1	NA	NA	Option
B.	iPhone 15	APPLE	A3090	NA	BCG-E8429A	360kHz Provided by manufacturer
C.	iPhone 11	APPLE	A2215	NA	BCG-E3307A	127.7kHz Provided by manufacturer

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	Type C to Type C USB Cable	1	1.5	Y	1	Accessory of EUT

3.3.1 Configuration of System under Test

Charging Mode:

Test Mode A



Test Mode B



Standby Mode:

Test Mode C



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:

FCC Part 15, Subpart C (15.209)

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 and Bandedge Measurement

4.1.1 Limits of Radiated Emission and Bandedge Measurement

FOR FREQUENCY BELOW 30MHz

Frequency (MHz)	Field Strength (dBuV/m)		Measurement Distance (meters)
	uV/m	dBuV/m	
0.009 – 0.490	2400 / F (kHz)	48.52-13.80	300
0.490 – 1.705	24000 / F (kHz)	33.80-22.97	30
1.705 – 30.0	30	29.54	30

FOR FREQUENCY BETWEEN 30-1000MHz

Frequency (MHz)	Field Strength	
	uV/m	dBuV/m
30-88	100	40.0
88-216	150	43.5
216-960	200	46.0
Above 960	500	54.0

4.1.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver KEYSIGHT	N9038A	MY55420137	May 08, 2024	May 07, 2025
Signal Analyzer Agilent	N9010A	MY52220207	Dec. 28, 2023	Dec. 27, 2024
Loop Antenna TESEQ	HLA 6121	45745	Aug. 08, 2023	Aug. 07, 2024
Pre-amplifier EMCI	EMC001340	980201	Sep. 27, 2023	Sep. 26, 2024
RF Coaxial Cable EMCI	5D-NM-BM	140901	Sep. 27, 2023	Sep. 26, 2024
Pre-Amplifier EMCI	EMC 330H	980112	Sep. 27, 2023	Sep. 26, 2024
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-472	Oct. 16, 2023	Oct. 15, 2024
RF Coaxial Cable WOKEN	8D-FB	Cable-Ch10-01	Sep. 14, 2023	Sep. 13, 2024
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	NA	NA	NA
Antenna Tower Max-Full	MFA-440H	AT93021705	NA	NA
Turn Table Max-Full	MFT-201SS	NA	NA	NA
Antenna Tower & Turn Table Controller Max-Full	MF-7802	NA	NA	NA
Boresight antenna tower fixture BV	BAF-02	7	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HY - 966 chamber 5.

4.1.3 Test Procedures

For Radiated emission below 30MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter 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. Parallel, perpendicular, and Ground-Parallel orientations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case 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, except for the frequency band (9kHz-90kHz, 110kHz-490kHz) set to average detect function and peak detect function.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 200 Hz at frequency below 150 kHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9 kHz or 10 kHz at frequency 150 kHz to 30MHz.
3. All modes of operation were investigated and the worst-case emissions are reported.

For Radiated emission above 30MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. 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 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 below 1 GHz.

Note:

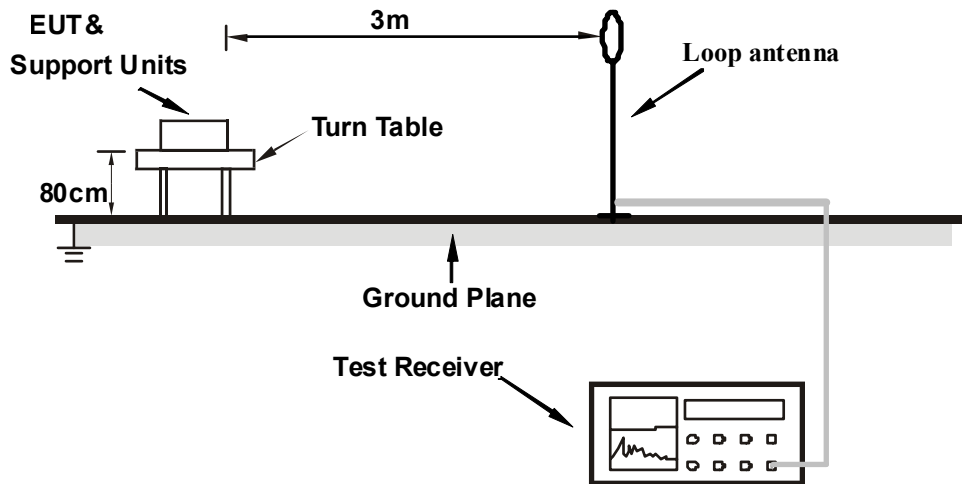
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 Deviation from Test Standard

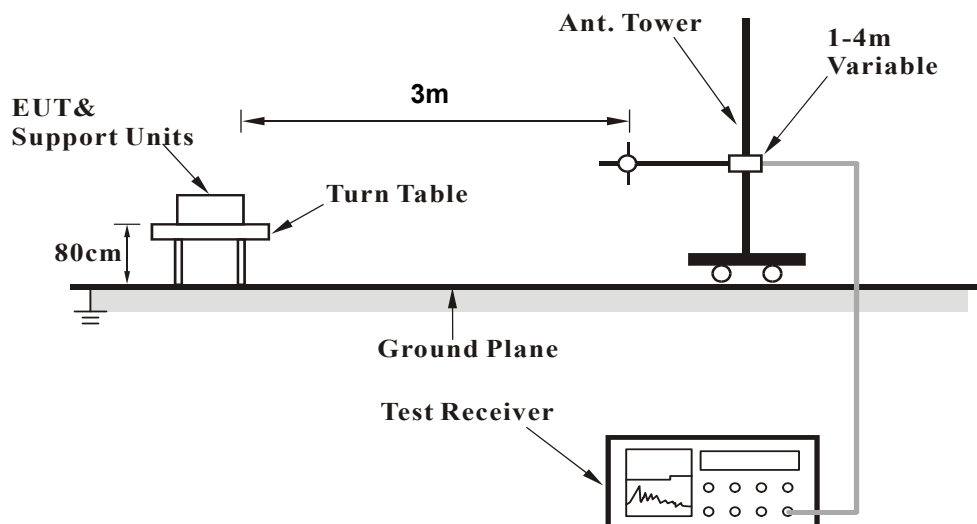
No deviation.

4.1.5 Test Set Up

For Radiated emission below 30MHz



For Radiated emission 30MHz to 1GHz



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

4.1.6 EUT Operating Conditions

Charging Mode:

- The EUT powered by adapter.
- Put the iPhone on the EUT (wireless charging) during the test.

Standby Mode:

- The EUT powered by adapter.

4.1.7 Test Results

Below 30MHz Data:

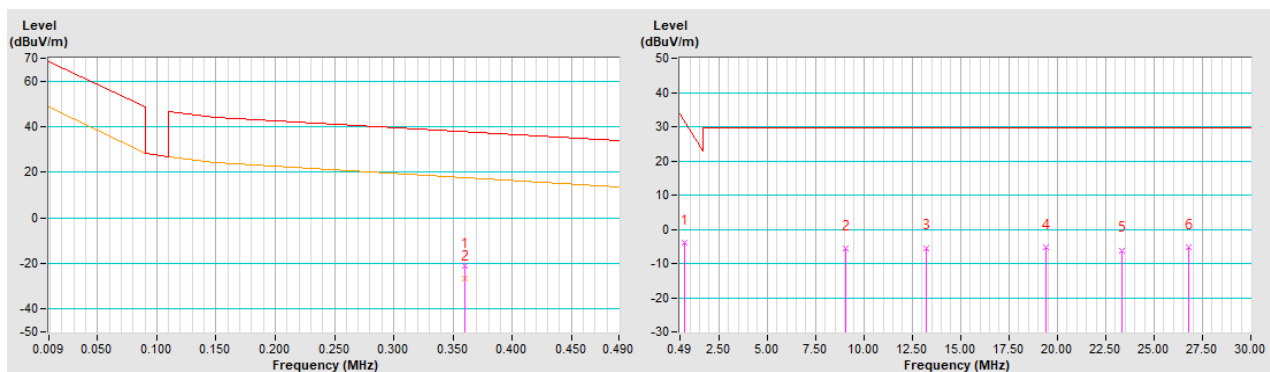
Charging Mode

Test Frequency	360.0kHz	Detector Function	Peak (PK)
Frequency Range	9kHz ~ 30MHz		Average (AV) Quasi-Peak (QP)
Test Mode	A		

Antenna Polarity : Parallel								
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	*0.3600	-21.2 PK	36.5	-57.7	1.00	153	39.0	-60.2
2	*0.3600	-26.7 AV	16.5	-43.2	1.00	153	33.5	-60.2
3	0.7200	-3.8 QP	30.5	-34.3	1.00	151	16.4	-20.2
4	9.0800	-5.5 QP	29.5	-35.0	1.00	290	13.4	-18.9
5	13.2100	-5.4 QP	29.5	-34.9	1.00	2	13.1	-18.5
6	19.4100	-5.3 QP	29.5	-34.8	1.00	313	12.5	-17.8
7	23.3300	-6.1 QP	29.5	-35.6	1.00	266	12.4	-18.5
8	26.8100	-5.4 QP	29.5	-34.9	1.00	140	12.4	-17.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Distance Factor(dB) + 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.
5. “ * “: Fundamental frequency.
6. Loop antenna was used for all radiated emission below 30MHz.
7. The test distance for below 0.49MHz is 3m, extrapolate the measured field strength to a distance of 300meters. (Distance factor@3m = $40 \cdot \log(3/300) = -80\text{dB}$)
The test distance for 0.49 ~ 30MHz is 3m, extrapolate the measured field strength to a distance of 30 meters. (Distance factor@3m = $40 \cdot \log(3/30) = -40\text{dB}$)

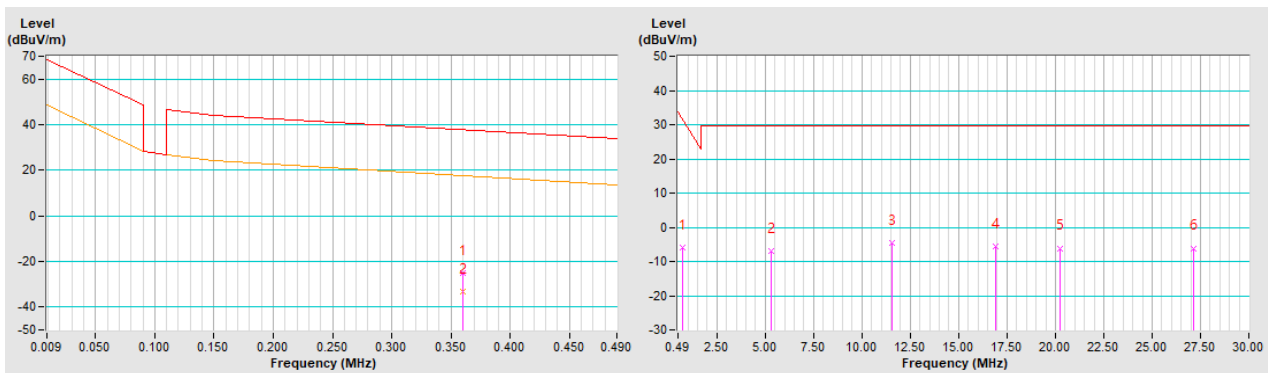


Test Frequency	360.0kHz	Detector Function	Peak (PK)
Frequency Range	9kHz ~ 30MHz		Average (AV) Quasi-Peak (QP)
Test Mode	A		

Antenna Polarity : Perpendicular								
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	*0.3600	-25.2 PK	36.5	-61.7	1.00	324	35.0	-60.2
2	*0.3600	-33.2 AV	16.5	-49.7	1.00	324	27.0	-60.2
3	0.7200	-6.1 QP	30.5	-36.6	1.00	310	14.1	-20.2
4	5.3300	-6.9 QP	29.5	-36.4	1.00	348	12.8	-19.7
5	11.5600	-4.7 QP	29.5	-34.2	1.00	112	13.6	-18.3
6	16.9000	-5.6 QP	29.5	-35.1	1.00	306	12.4	-18.0
7	20.2300	-6.1 QP	29.5	-35.6	1.00	148	11.9	-18.0
8	27.1700	-6.1 QP	29.5	-35.6	1.00	341	11.7	-17.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Distance Factor(dB) + 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.
5. “ * “: Fundamental frequency.
6. Loop antenna was used for all radiated emission below 30MHz.
7. The test distance for below 0.49MHz is 3m, extrapolate the measured field strength to a distance of 300meters. (Distance factor@3m = $40 \cdot \log(3/300) = -80\text{dB}$)
The test distance for 0.49 ~ 30MHz is 3m, extrapolate the measured field strength to a distance of 30 meters. (Distance factor@3m = $40 \cdot \log(3/30) = -40\text{dB}$)

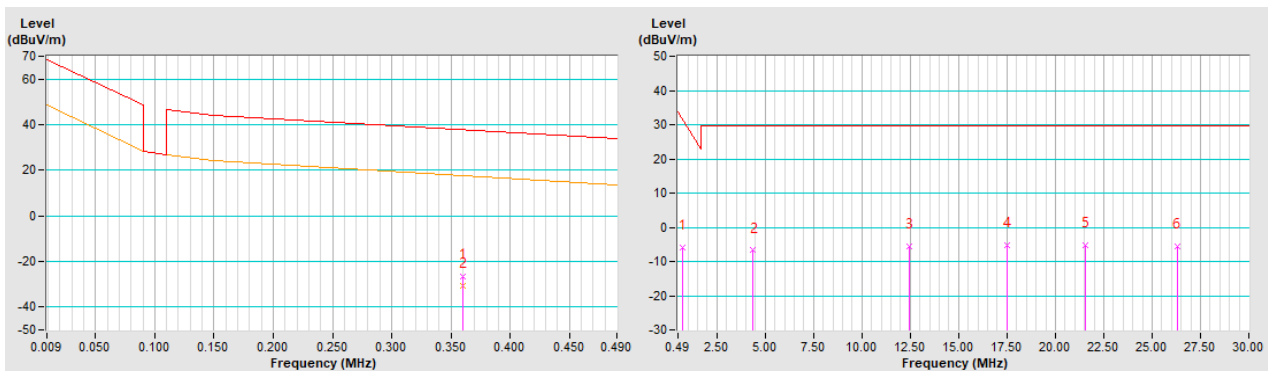


Test Frequency	360.0kHz	Detector Function	Peak (PK)
Frequency Range	9kHz ~ 30MHz		Average (AV) Quasi-Peak (QP)
Test Mode	A		

Antenna Polarity : Ground-parallel								
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	*0.3600	-26.8 PK	36.5	-63.3	1.00	263	33.4	-60.2
2	*0.3600	-30.9 AV	16.5	-47.4	1.00	263	29.3	-60.2
3	0.7200	-5.8 QP	30.5	-36.3	1.00	115	14.4	-20.2
4	4.3900	-6.8 QP	29.5	-36.3	1.00	47	13.4	-20.2
5	12.4700	-5.6 QP	29.5	-35.1	1.00	293	12.8	-18.4
6	17.4900	-5.2 QP	29.5	-34.7	1.00	149	12.8	-18.0
7	21.5600	-5.2 QP	29.5	-34.7	1.00	13	13.0	-18.2
8	26.2800	-5.6 QP	29.5	-35.1	1.00	83	12.3	-17.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Distance Factor(dB) + 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.
5. “ * “: Fundamental frequency.
6. Loop antenna was used for all radiated emission below 30MHz.
7. The test distance for below 0.49MHz is 3m, extrapolate the measured field strength to a distance of 300meters. (Distance factor@3m = $40 \cdot \log(3/300) = -80\text{dB}$)
The test distance for 0.49 ~ 30MHz is 3m, extrapolate the measured field strength to a distance of 30 meters. (Distance factor@3m = $40 \cdot \log(3/30) = -40\text{dB}$)

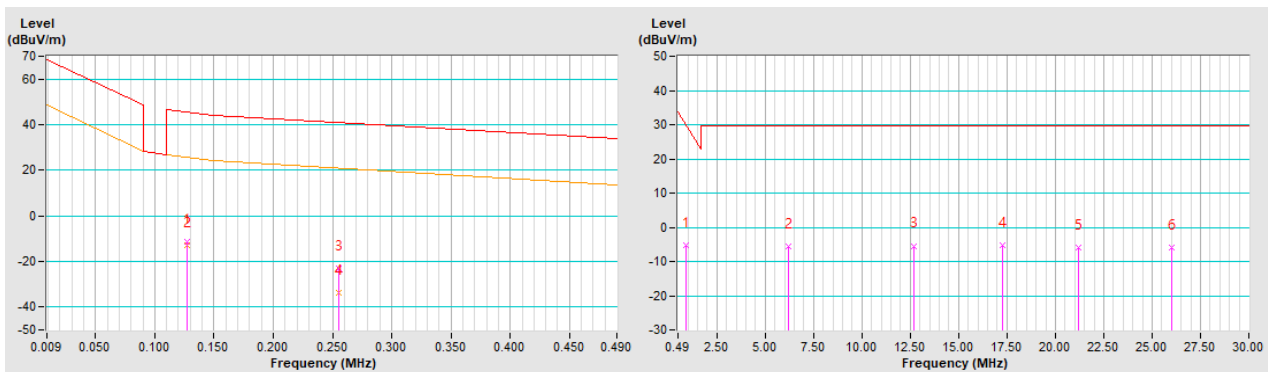


Test Frequency	127.7kHz	Detector Function	Peak (PK)
Frequency Range	9kHz ~ 30MHz		Average (AV)
			Quasi-Peak (QP)
Test Mode	B		

Antenna Polarity : Parallel								
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	*0.1277	-11.5 PK	45.5	-57.0	1.00	105	49.1	-60.6
2	*0.1277	-13.0 AV	25.5	-38.5	1.00	105	47.6	-60.6
3	0.2554	-23.1 PK	39.5	-62.6	1.00	231	37.1	-60.2
4	0.2554	-33.9 AV	19.5	-53.4	1.00	231	26.3	-60.2
5	0.9326	-5.2 QP	28.2	-33.4	1.00	279	15.0	-20.2
6	6.1854	-5.7 QP	29.5	-35.2	1.00	2	13.1	-18.8
7	12.6776	-5.4 QP	29.5	-34.9	1.00	263	13.0	-18.4
8	17.2812	-5.2 QP	29.5	-34.7	1.00	19	12.8	-18.0
9	21.1765	-6.1 QP	29.5	-35.6	1.00	198	12.1	-18.2
10	25.9866	-5.9 QP	29.5	-35.4	1.00	83	12.1	-18.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Distance Factor(dB) + 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.
5. “ * “: Fundamental frequency.
6. Loop antenna was used for all radiated emission below 30MHz.
7. The test distance for below 0.49MHz is 3m, extrapolate the measured field strength to a distance of 300meters. (Distance factor@3m = $40 \cdot \log(3/300) = -80\text{dB}$)
The test distance for 0.49 ~ 30MHz is 3m, extrapolate the measured field strength to a distance of 30 meters. (Distance factor@3m = $40 \cdot \log(3/30) = -40\text{dB}$)

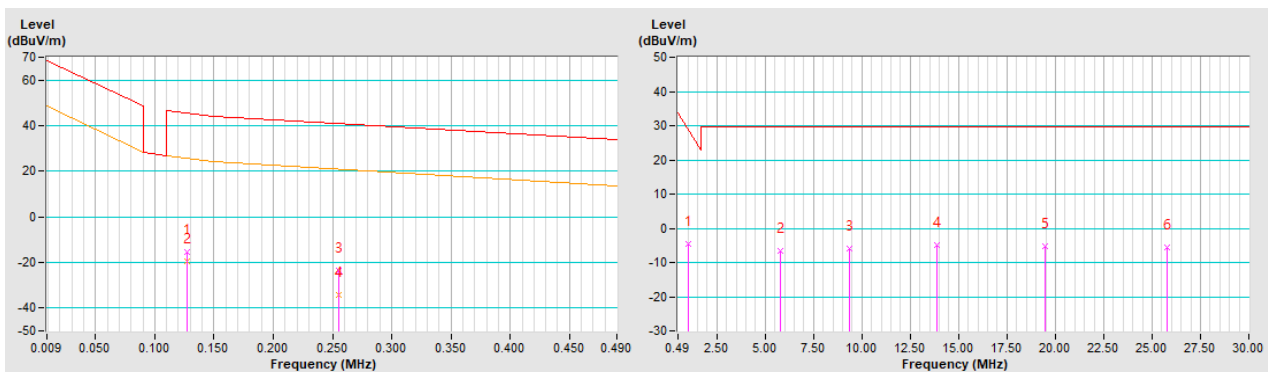


Test Frequency	127.7kHz	Detector Function	Peak (PK)
Frequency Range	9kHz ~ 30MHz		Average (AV)
			Quasi-Peak (QP)
Test Mode	B		

Antenna Polarity : Perpendicular								
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	*0.1277	-15.2 PK	45.5	-60.7	1.00	159	45.4	-60.6
2	*0.1277	-19.3 AV	25.5	-44.8	1.00	159	41.3	-60.6
3	0.2554	-23.5 PK	39.5	-63.0	1.00	135	36.7	-60.2
4	0.2554	-34.1 AV	19.5	-53.6	1.00	135	26.1	-60.2
5	1.0507	-4.6 QP	27.2	-31.8	1.00	86	15.7	-20.3
6	5.8018	-6.5 QP	29.5	-36.0	1.00	329	12.6	-19.1
7	9.3725	-6.0 QP	29.5	-35.5	1.00	317	12.8	-18.8
8	13.8875	-5.0 QP	29.5	-34.5	1.00	53	13.7	-18.7
9	19.4649	-5.4 QP	29.5	-34.9	1.00	187	12.4	-17.8
10	25.7506	-5.6 QP	29.5	-35.1	1.00	12	12.3	-17.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Distance Factor(dB) + 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.
5. “ * “: Fundamental frequency.
6. Loop antenna was used for all radiated emission below 30MHz.
7. The test distance for below 0.49MHz is 3m, extrapolate the measured field strength to a distance of 300meters. (Distance factor@3m = $40 \cdot \log(3/300) = -80\text{dB}$)
The test distance for 0.49 ~ 30MHz is 3m, extrapolate the measured field strength to a distance of 30 meters. (Distance factor@3m = $40 \cdot \log(3/30) = -40\text{dB}$)

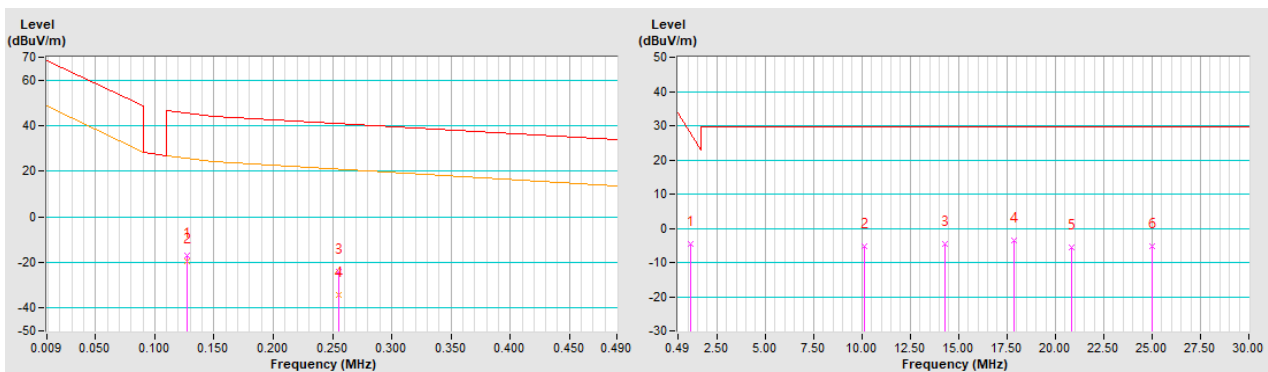


Test Frequency	127.7kHz	Detector Function	Peak (PK)
Frequency Range	9kHz ~ 30MHz		Average (AV)
			Quasi-Peak (QP)
Test Mode	B		

Antenna Polarity : Ground-parallel								
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	*0.1277	-16.8 PK	45.5	-62.3	1.00	56	43.8	-60.6
2	*0.1277	-19.5 AV	25.5	-45.0	1.00	56	41.1	-60.6
3	0.2554	-24.0 PK	39.5	-63.5	1.00	196	36.2	-60.2
4	0.2554	-34.4 AV	19.5	-53.9	1.00	196	25.8	-60.2
5	1.1392	-4.7 QP	26.5	-31.2	1.00	247	15.6	-20.3
6	10.1398	-5.1 QP	29.5	-34.6	1.00	133	13.5	-18.6
7	14.3007	-4.6 QP	29.5	-34.1	1.00	159	14.1	-18.7
8	17.8714	-3.5 QP	29.5	-33.0	1.00	2	14.4	-17.9
9	20.8224	-5.6 QP	29.5	-35.1	1.00	225	12.5	-18.1
10	25.0128	-5.3 QP	29.5	-34.8	1.00	263	12.1	-17.4

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Distance Factor(dB) + 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.
5. “ * “: Fundamental frequency.
6. Loop antenna was used for all radiated emission below 30MHz.
7. The test distance for below 0.49MHz is 3m, extrapolate the measured field strength to a distance of 300meters. (Distance factor@3m = $40 \cdot \log(3/300) = -80\text{dB}$)
The test distance for 0.49 ~ 30MHz is 3m, extrapolate the measured field strength to a distance of 30 meters. (Distance factor@3m = $40 \cdot \log(3/30) = -40\text{dB}$)



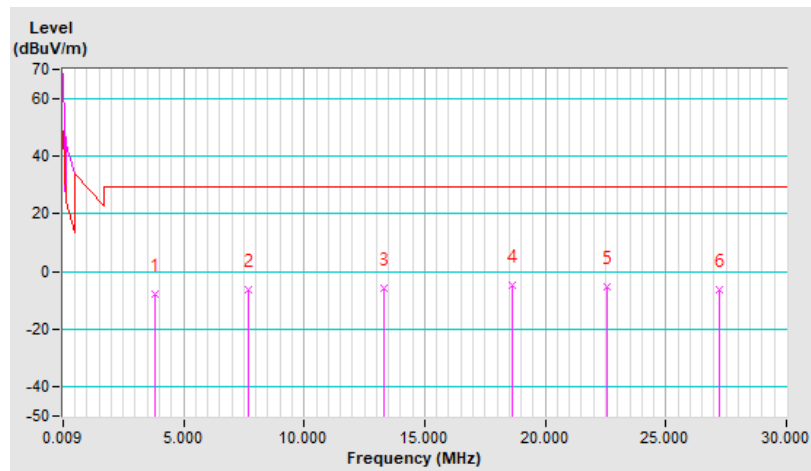
Standby Mode

Test Frequency	-	Detector Function	Peak (PK)
Frequency Range	9kHz ~ 30MHz		Average (AV) Quasi-Peak (QP)
Test Mode	C		

Antenna Polarity : Parallel								
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	3.8478	-7.7 QP	29.5	-37.2	1.00	219	12.5	-20.2
2	7.7167	-6.2 QP	29.5	-35.7	1.00	2	12.7	-18.9
3	13.3250	-5.7 QP	29.5	-35.2	1.00	344	12.9	-18.6
4	18.6034	-4.8 QP	29.5	-34.3	1.00	263	13.0	-17.8
5	22.5922	-5.4 QP	29.5	-34.9	1.00	273	13.0	-18.4
6	27.2108	-6.2 QP	29.5	-35.7	1.00	252	11.6	-17.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Distance Factor(dB) + 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.
5. “ * “: Fundamental frequency.
6. Loop antenna was used for all radiated emission below 30MHz.
7. The test distance for 0.49 ~ 30MHz is 3m, extrapolate the measured field strength to a distance of 30 meters. (Distance factor@3m = $40 \cdot \log(3/30) = -40\text{dB}$)

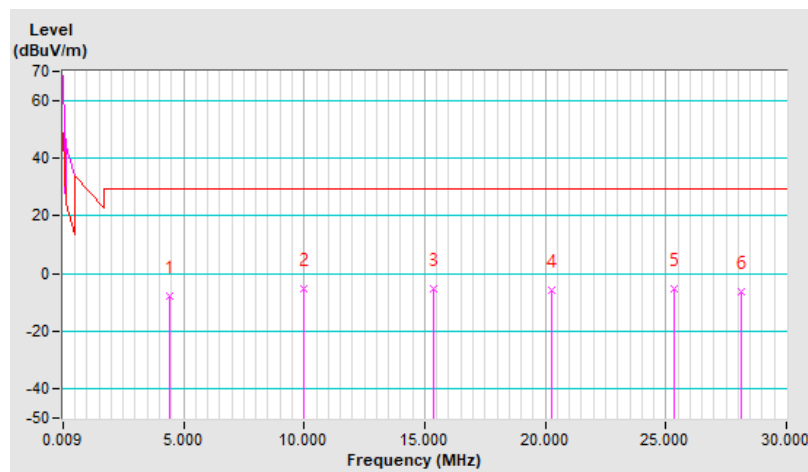


Test Frequency	-	Detector Function	Quasi-Peak (QP)
Frequency Range	9kHz ~ 30MHz		
Test Mode	C		

Antenna Polarity : Perpendicular								
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	4.4477	-7.9 QP	29.5	-37.4	1.00	88	12.3	-20.2
2	9.9960	-5.0 QP	29.5	-34.5	1.00	99	13.6	-18.6
3	15.3644	-5.0 QP	29.5	-34.5	1.00	23	13.5	-18.5
4	20.2529	-5.6 QP	29.5	-35.1	1.00	212	12.4	-18.0
5	25.3214	-5.3 QP	29.5	-34.8	1.00	36	12.3	-17.6
6	28.1406	-6.1 QP	29.5	-35.6	1.00	2	11.8	-17.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Distance Factor(dB) + 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.
5. “ * “: Fundamental frequency.
6. Loop antenna was used for all radiated emission below 30MHz.
7. The test distance for 0.49 ~ 30MHz is 3m, extrapolate the measured field strength to a distance of 30 meters. (Distance factor@3m = $40 \cdot \log(3/30) = -40\text{dB}$)

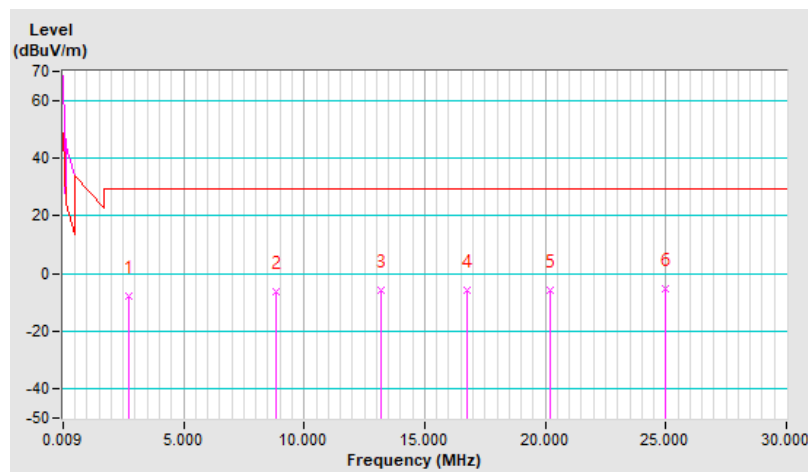


Test Frequency	-	Detector Function	Quasi-Peak (QP)
Frequency Range	9kHz ~ 30MHz		
Test Mode	C		

Antenna Polarity : Ground-parallel								
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	2.7382	-7.7 QP	29.5	-37.2	1.00	17	12.8	-20.5
2	8.8264	-6.2 QP	29.5	-35.7	1.00	129	12.7	-18.9
3	13.1750	-5.8 QP	29.5	-35.3	1.00	117	12.7	-18.5
4	16.7440	-5.8 QP	29.5	-35.3	1.00	37	12.3	-18.1
5	20.2229	-5.6 QP	29.5	-35.1	1.00	45	12.4	-18.0
6	24.9615	-5.2 QP	29.5	-34.7	1.00	134	12.2	-17.4

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m).
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Distance Factor(dB) + 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.
5. “ * “: Fundamental frequency.
6. Loop antenna was used for all radiated emission below 30MHz.
7. The test distance for 0.49 ~ 30MHz is 3m, extrapolate the measured field strength to a distance of 30 meters. (Distance factor@3m = $40 \cdot \log(3/30) = -40\text{dB}$)



Below 1GHz Data:

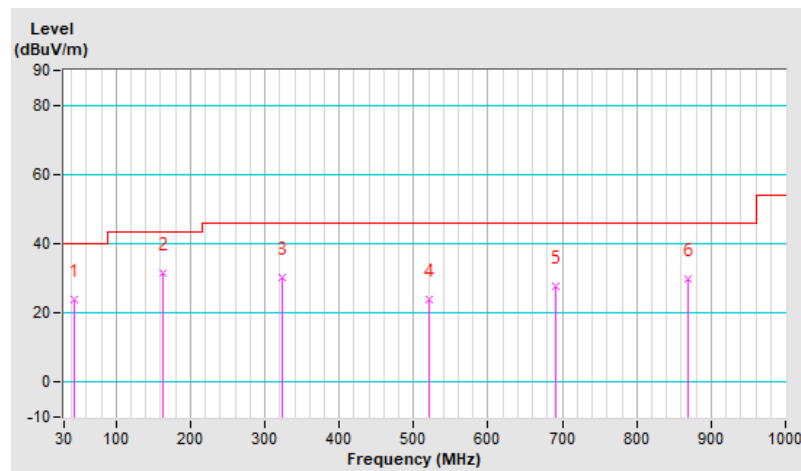
Charging Mode

Test Frequency	360.0kHz	Detector Function	Quasi-Peak (QP)
Frequency Range	30MHz ~ 1GHz		
Test Mode	A		

Antenna Polarity & Test Distance: Horizontal At 3m								
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	43.58	24.0 QP	40.0	-16.0	2.00 H	6	36.6	-12.6
2	163.86	31.4 QP	43.5	-12.1	1.00 H	253	44.2	-12.8
3	322.94	30.4 QP	46.0	-15.6	1.00 H	124	41.7	-11.3
4	520.82	24.1 QP	46.0	-21.9	1.50 H	278	30.4	-6.3
5	690.57	27.6 QP	46.0	-18.4	1.00 H	201	31.0	-3.4
6	869.05	29.7 QP	46.0	-16.3	2.00 H	180	30.5	-0.8

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

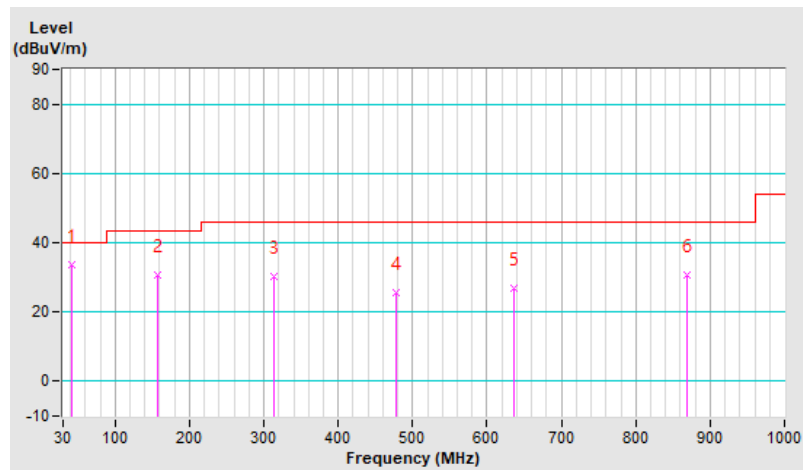


Test Frequency	360.0kHz	Detector Function	Quasi-Peak (QP)
Frequency Range	30MHz ~ 1GHz		
Test Mode	A		

Antenna Polarity & Test Distance: Vertical At 3m								
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	42.61	33.8 QP	40.0	-6.2	1.00 V	0	46.4	-12.6
2	158.04	30.7 QP	43.5	-12.8	1.50 V	190	43.3	-12.6
3	313.24	30.4 QP	46.0	-15.6	1.00 V	184	41.9	-11.5
4	478.14	25.4 QP	46.0	-20.6	2.00 V	29	32.9	-7.5
5	637.22	26.8 QP	46.0	-19.2	1.00 V	0	31.0	-4.2
6	869.05	30.6 QP	46.0	-15.4	2.00 V	92	31.4	-0.8

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

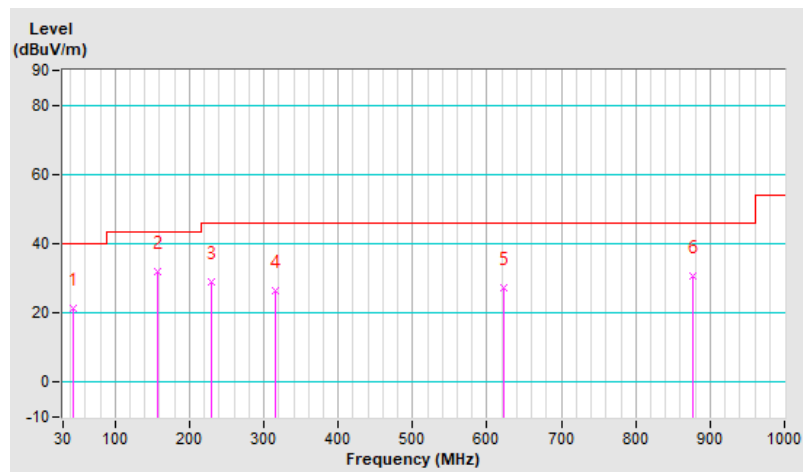


Test Frequency	127.7kHz	Detector Function	Quasi-Peak (QP)
Frequency Range	30MHz ~ 1GHz		
Test Mode	B		

Antenna Polarity & Test Distance: Horizontal At 3m								
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	43.58	21.4 QP	40.0	-18.6	2.00 H	23	34.0	-12.6
2	157.07	31.8 QP	43.5	-11.7	1.00 H	263	44.3	-12.5
3	228.85	29.1 QP	46.0	-16.9	1.50 H	114	44.6	-15.5
4	316.15	26.6 QP	46.0	-19.4	2.00 H	118	38.0	-11.4
5	621.70	27.1 QP	46.0	-18.9	2.00 H	150	31.6	-4.5
6	876.81	30.5 QP	46.0	-15.5	1.00 H	122	31.4	-0.9

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

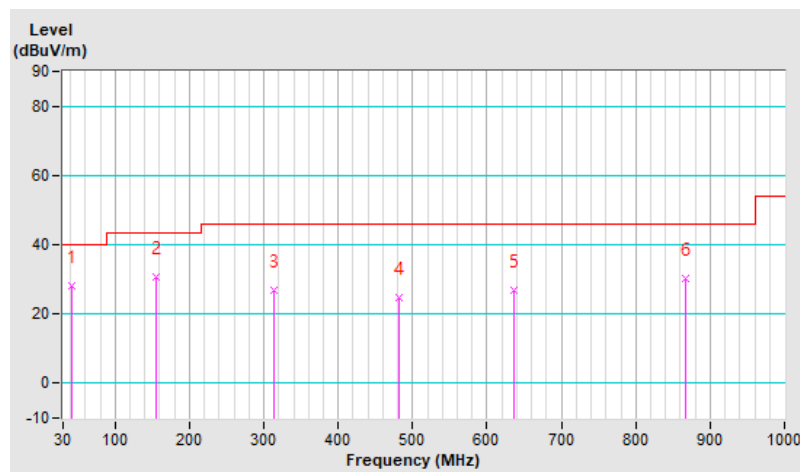


Test Frequency	127.7kHz	Detector Function	Quasi-Peak (QP)
Frequency Range	30MHz ~ 1GHz		
Test Mode	B		

Antenna Polarity & Test Distance: Vertical At 3m								
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	42.61	28.1 QP	40.0	-11.9	1.50 V	2	40.7	-12.6
2	155.13	30.7 QP	43.5	-12.8	1.00 V	187	43.3	-12.6
3	313.24	26.7 QP	46.0	-19.3	2.00 V	184	38.2	-11.5
4	482.02	24.8 QP	46.0	-21.2	1.00 V	100	32.2	-7.4
5	635.28	27.0 QP	46.0	-19.0	1.50 V	274	31.3	-4.3
6	866.14	30.2 QP	46.0	-15.8	2.00 V	5	31.1	-0.9

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



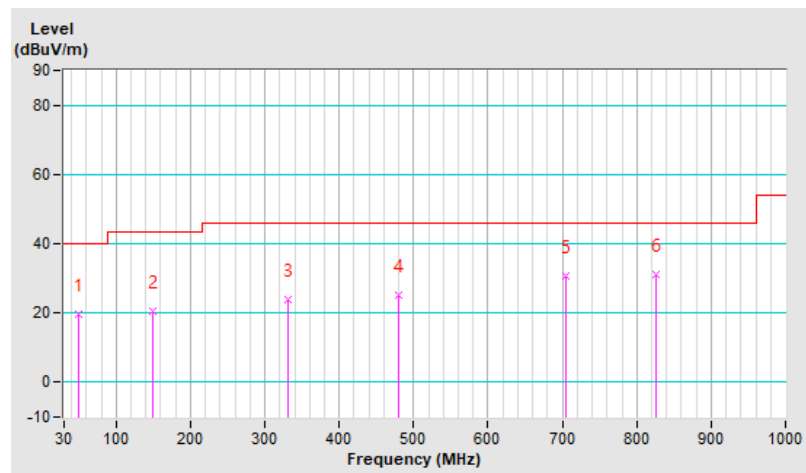
Standby Mode

Test Frequency	-	Detector Function	Quasi-Peak (QP)
Frequency Range	30MHz ~ 1GHz		
Test Mode	C		

Antenna Polarity & Test Distance: Horizontal At 3m								
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	49.40	19.8 QP	40.0	-20.2	1.00 H	152	32.3	-12.5
2	148.34	20.7 QP	43.5	-22.8	1.50 H	267	33.5	-12.8
3	330.70	23.8 QP	46.0	-22.2	2.00 H	122	35.0	-11.2
4	480.08	25.2 QP	46.0	-20.8	1.00 H	11	32.6	-7.4
5	704.15	30.5 QP	46.0	-15.5	1.00 H	167	33.7	-3.2
6	826.37	30.9 QP	46.0	-15.1	1.50 H	2	31.8	-0.9

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

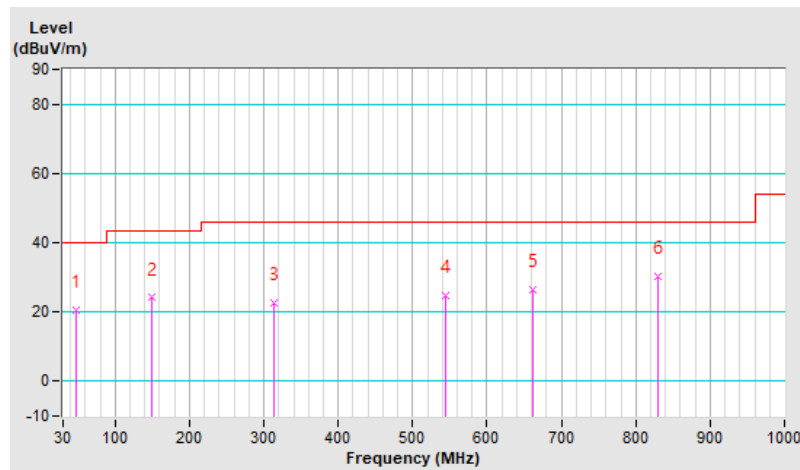


Test Frequency	-	Detector Function	Quasi-Peak (QP)
Frequency Range	30MHz ~ 1GHz		
Test Mode	C		

Antenna Polarity & Test Distance: Vertical At 3m								
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	47.46	20.4 QP	40.0	-19.6	1.00 V	97	32.9	-12.5
2	148.34	24.1 QP	43.5	-19.4	1.00 V	199	36.9	-12.8
3	314.21	22.6 QP	46.0	-23.4	1.50 V	165	34.1	-11.5
4	545.07	24.6 QP	46.0	-21.4	2.00 V	79	30.8	-6.2
5	662.44	26.5 QP	46.0	-19.5	1.00 V	15	30.4	-3.9
6	829.28	30.1 QP	46.0	-15.9	1.50 V	146	31.0	-0.9

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



4.2 Conducted Emission Measurement

4.2.1 Limits of Conducted Emission Measurement

Frequency (MHz)	Conducted Limit (dBuV)	
	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 lower limit shall apply at the transition frequencies.

2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

4.2.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver R&S	ESR3	102783	Dec. 13, 2023	Dec. 12, 2024
RF Coaxial Cable WORKEN	5D-FB	Cable-cond2-01	Sep. 02, 2023	Sep. 01, 2024
LISN R&S	ESH2-Z5	100100	Mar. 06, 2024	Mar. 05, 2025
LISN R&S	ESH3-Z5	100116	Feb. 21, 2024	Feb. 20, 2025
Software BV ADT	BVADT_Conc_ V7.3.7.4	NA	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

2. The test was performed in HY - Conduction 2.

3. The VCCI Site Registration No. is C-12047.

4.2.3 Test Procedures

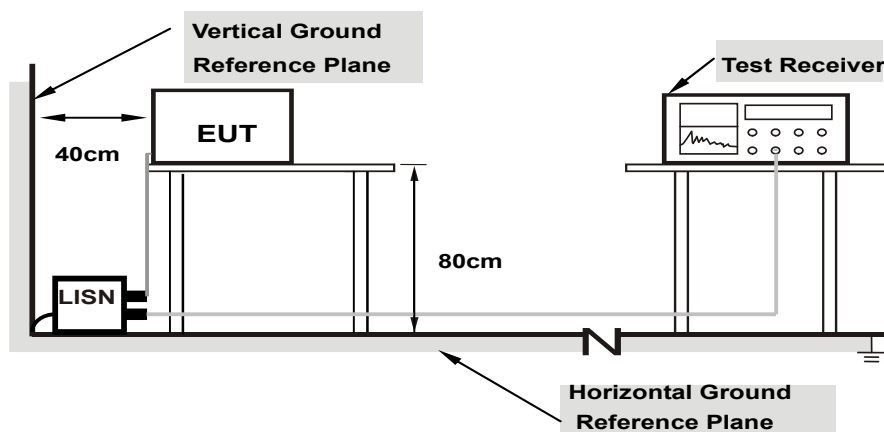
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance 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) were not recorded.

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.

4.2.4 Deviation from Test Standard

No deviation.

4.2.5 Test Setup



Note: 1.Support units were connected to second LISN.

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

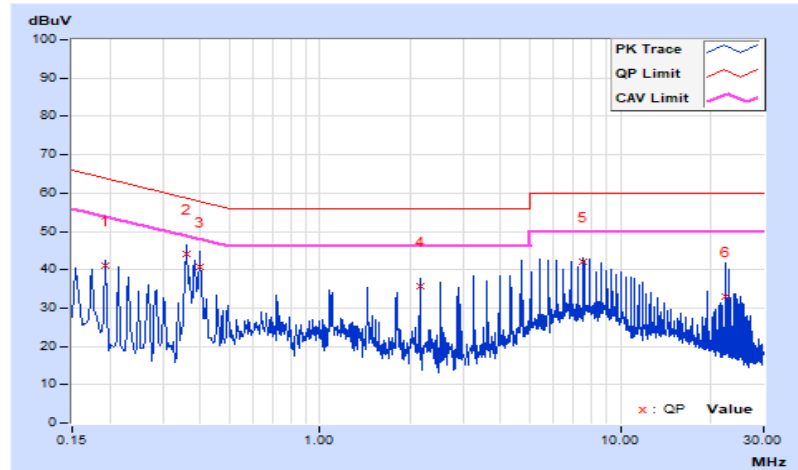
Charging Mode

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	A		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19400	10.42	30.66	12.81	41.08	23.23	63.86	53.86	-22.78	-30.63
2	0.36200	10.49	33.54	28.22	44.03	38.71	58.68	48.68	-14.65	-9.97
3	0.39800	10.51	30.10	15.54	40.61	26.05	57.90	47.90	-17.29	-21.85
4	2.15800	10.58	25.03	20.76	35.61	31.34	56.00	46.00	-20.39	-14.66
5	7.55800	10.72	31.40	28.70	42.12	39.42	60.00	50.00	-17.88	-10.58
6	22.35000	11.14	21.78	5.33	32.92	16.47	60.00	50.00	-27.08	-33.53

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.

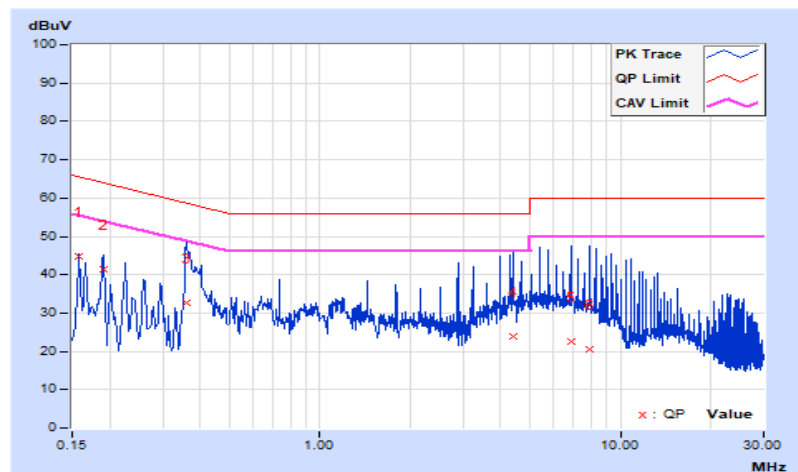


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	A		

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	0.15800	10.44	34.30	15.48	44.74	25.92	65.57	55.57	-20.83	-29.65
2	0.19000	10.46	30.88	12.56	41.34	23.02	64.04	54.04	-22.70	-31.02
3	0.36162	10.54	22.04	12.03	32.58	22.57	58.69	48.69	-26.11	-26.12
4	4.39400	10.76	13.05	3.03	23.81	13.79	56.00	46.00	-32.19	-32.21
5	6.83800	10.79	11.82	1.26	22.61	12.05	60.00	50.00	-37.39	-37.95
6	7.92200	10.81	9.82	2.36	20.63	13.17	60.00	50.00	-39.37	-36.83

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.

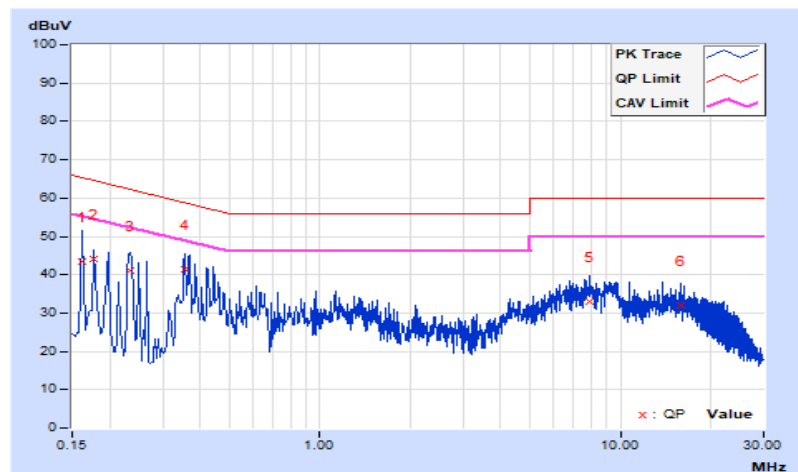


Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	B		

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	0.16200	10.39	32.96	12.27	43.35	22.66	65.36	55.36	-22.01	-32.70
2	0.17800	10.40	33.67	18.78	44.07	29.18	64.58	54.58	-20.51	-25.40
3	0.23351	10.44	30.74	9.88	41.18	20.32	62.32	52.32	-21.14	-32.00
4	0.35400	10.49	31.03	12.36	41.52	22.85	58.87	48.87	-17.35	-26.02
5	7.92200	10.72	22.12	15.06	32.84	25.78	60.00	50.00	-27.16	-24.22
6	15.85000	10.97	20.98	17.70	31.95	28.67	60.00	50.00	-28.05	-21.33

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.

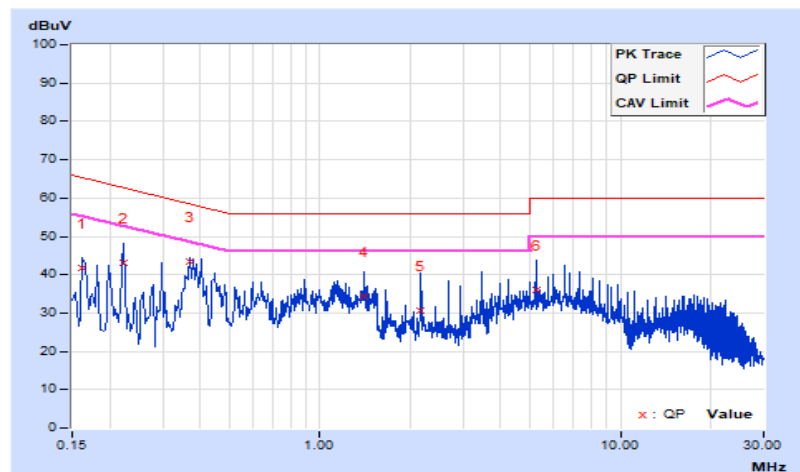


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	B		

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	0.16200	10.44	31.36	13.98	41.80	24.42	65.36	55.36	-23.56	-30.94
2	0.22200	10.48	32.64	10.15	43.12	20.63	62.74	52.74	-19.62	-32.11
3	0.37000	10.55	33.02	15.92	43.57	26.47	58.50	48.50	-14.93	-22.03
4	1.40600	10.60	23.69	13.18	34.29	23.78	56.00	46.00	-21.71	-22.22
5	2.17000	10.62	20.09	11.42	30.71	22.04	56.00	46.00	-25.29	-23.96
6	5.24200	10.77	25.18	16.39	35.95	27.16	60.00	50.00	-24.05	-22.84

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.



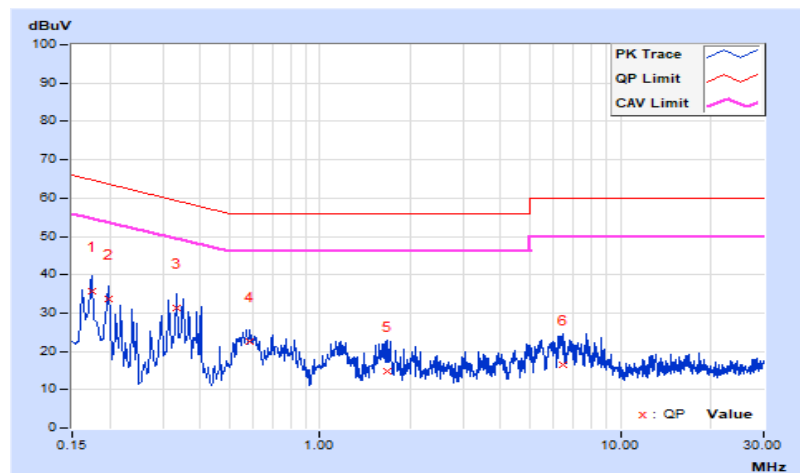
Standby Mode

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	C		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17400	10.40	25.37	15.77	35.77	26.17	64.77	54.77	-29.00	-28.60
2	0.19800	10.42	23.27	4.61	33.69	15.03	63.69	53.69	-30.00	-38.66
3	0.33400	10.48	20.71	4.17	31.19	14.65	59.35	49.35	-28.16	-34.70
4	0.58600	10.53	12.14	6.12	22.67	16.65	56.00	46.00	-33.33	-29.35
5	1.67800	10.57	4.28	2.54	14.85	13.11	56.00	46.00	-41.15	-32.89
6	6.42600	10.70	5.64	3.12	16.34	13.82	60.00	50.00	-43.66	-36.18

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.

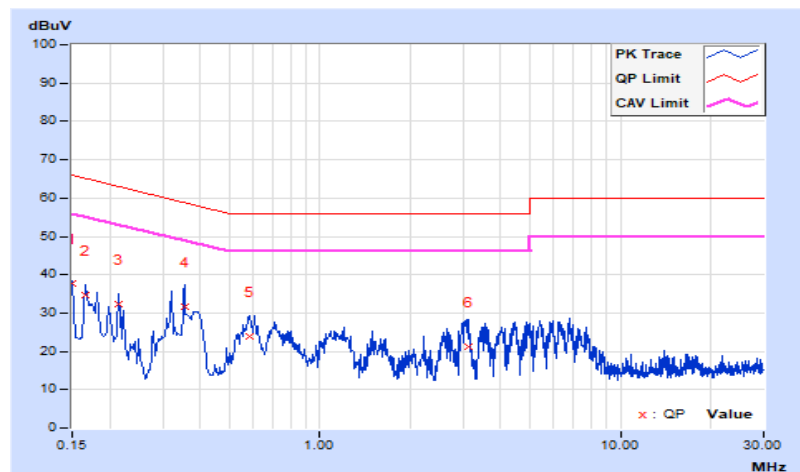


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	C		

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	10.43	27.15	13.06	37.58	23.49	66.00	56.00	-28.42	-32.51
2	0.16600	10.44	24.25	11.66	34.69	22.10	65.16	55.16	-30.47	-33.06
3	0.21400	10.48	21.81	6.96	32.29	17.44	63.05	53.05	-30.76	-35.61
4	0.35400	10.54	21.13	11.05	31.67	21.59	58.87	48.87	-27.20	-27.28
5	0.58104	10.57	13.30	6.08	23.87	16.65	56.00	46.00	-32.13	-29.35
6	3.10600	10.69	10.68	2.05	21.37	12.74	56.00	46.00	-34.63	-33.26

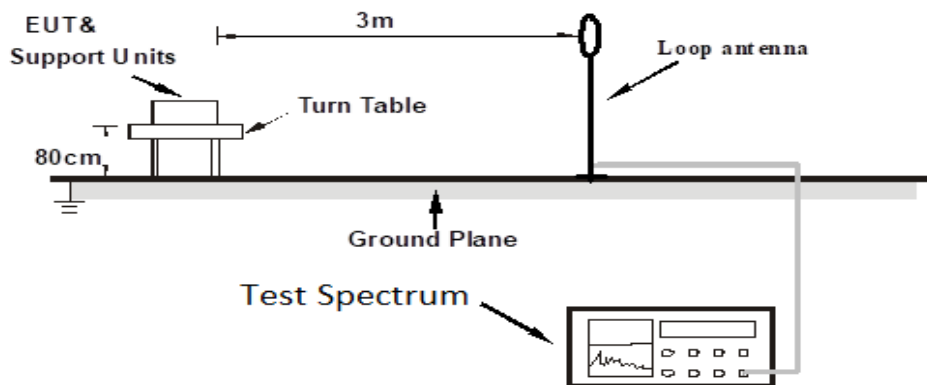
Remarks:

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.



4.3 20dB Bandwidth Measurement

4.3.1 Test SetUp



4.3.2 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.3 Test Procedure

- The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter Semi-anechoic chamber room. The table was rotated 360 degrees to determine the position of the highest radiation. Then the Loop antenna was rotated 360 degrees to determine the position of the highest radiation.
- The antenna is a broadband loop antenna, which is fixed of a 1m height above the ground, and set away from 3m to the EUT to find the disturbance reading on each frequency.
- The test-spectrum system was set to peak detect function and specified bandwidth.

4.3.4 Deviation from Test Standard

No deviation.

4.3.5 EUT Operating Conditions

The software provided by client to enable the EUT under transmission condition continuously.

4.3.6 Test Results

Test Mode A

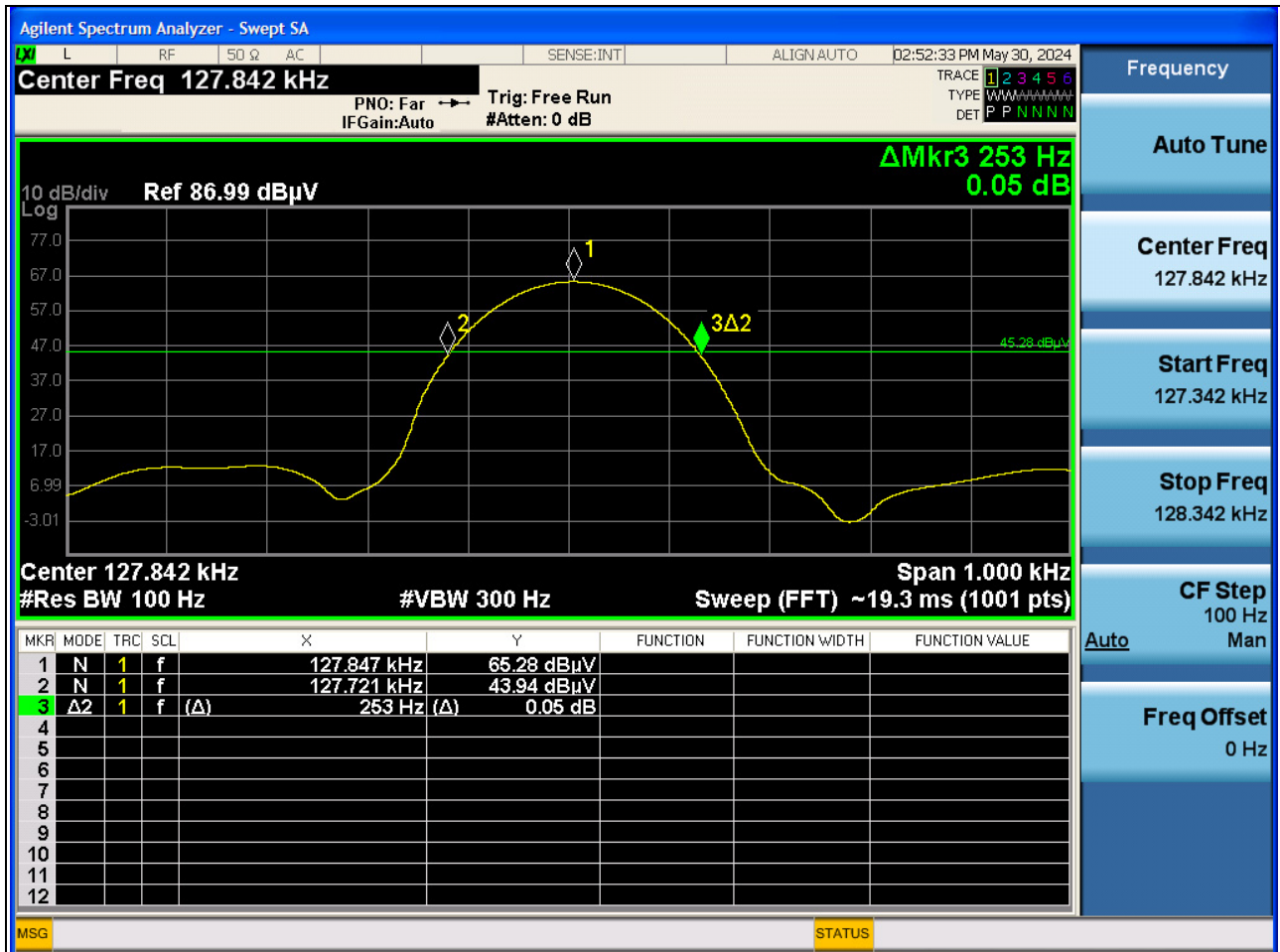
Frequency (kHz)	20dB Bandwidth (Hz)	Pass / Fail
360.0	254	Pass



Note: The signal look like CW signal, so RBW can't be match 1~5 % OBW.

Test Mode B

Frequency (kHz)	20dB Bandwidth (Hz)	Pass / Fail
127.7	253	Pass



Note: The signal look like CW signal, so RBW can't be match 1~5 % OBW.

5 Pictures of Test Arrangements

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

Appendix – 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 FCC recognized accredited test firms and accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

Lin Kou EMC/RF Lab

Tel: 886-2-26052180

Fax: 886-2-26051924

Hsin Chu EMC/RF/Telecom Lab

Tel: 886-3-6668565

Fax: 886-3-6668323

Hwa Ya EMC/RF/Safety Lab

Tel: 886-3-3183232

Fax: 886-3-3270892

Email: service.adt@tw.bureauveritas.com

Web Site: <http://ee.bureauveritas.com.tw>

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

--- END ---