Test Report

Applicant Name:	TennRich International Corp.
Address:	1-3, Alley 5, Lane 305, Sec.1, Shin Nan Road, Lu Chu District, Taoyuan City, Taiwan 338
EUT Name:	Portable Power Station
Brand Name:	Energizer
Model Number:	PPS300W2
Series Model Number:	Refer to section 2

Issued By

Company Name:	Shenzhen BANTEK Testing Co., Ltd.
Address:	A5&A6,Building B1&B2,No.45 Gangtou Road,BoganCommunity, Shajing Street,Bao'an District, Shenzhen,Guangdong,China 518104
Report Number:	BTEK230914007AE001
Test Standards:	47 CFR Part 15 Subpart C
FCC ID:	2AU4P-PPS300W2
Test Conclusion:	Pass
Test Date:	2023-09-18 to 2023-09-21
Date of Issue:	2023-09-21
Prepared By:	Carl Yang /Project Engineer
Date:	2023-09-21
Approved By:	Damon Su / EMC Manager
Date:	2023-09-21

* In the configuration tested, the EUT complied with the standards specified above.

Revision History		
Version	Issue Date	Revisions Content
R_V0	2023-09-21	Original
Note:	*Once the revision has been made, then previous versions reports are invalid.*	

Table of Contents

1. Introduction

1.1 Identification of Testing Laboratory

Company Name:	Shenzhen BANTEK Testing Co., Ltd.
Address:	A5&A6,Building B1&B2,No.45 Gangtou Road,BoganCommunity, Shajing Street,Bao'an District, Shenzhen,Guangdong,China 518104
Phone Number:	+86(755) 2334 4200
Fax Number:	+86(755) 2334 4200

1.2 Identification of the Responsible Testing Location

Test Location:	Shenzhen BANTEK Testing Co., Ltd.
Address:	A5&A6,Building B1&B2,No.45 Gangtou Road,BoganCommunity, Shajing Street,Bao'an District, Shenzhen,Guangdong,China 518104
Description:	All measurement facilities used to collect the measurement data are located at A5&A6,Building B1&B2,No.45 Gangtou Road,BoganCommunity, Shajing Street,Bao'an District, Shenzhen,Guangdong,China 518104
FCC Registration Number:	264293
Designation Number:	CN1356

1.3 Laboratory Condition

Ambient Temperature:	20℃ to 25℃
Ambient Relative Humidity:	45% to 55%
Ambient Pressure:	100 kPa to 102 kPa

1.4 Announcement

(1) The test report is invalid if not marked with the signatures of the persons responsible for preparing, reviewing and approving the test report.

(2) This document may not be altered or revised in any way unless done so by BANTEK and all revisions are duly noted in the revisions section.

(3) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.

(4) The laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant.

2. Product Information

2.1 Application Information

Company Name:	TennRich International Corp.
Address:	1-3, Alley 5, Lane 305, Sec.1, Shin Nan Road, Lu Chu District, Taoyuan City, Taiwan 338

2.2 Manufacturer Information

Company Name:	Shenzhen Newman Hyde Intelligent Technology Co., Ltd
Address:	902, No.2500106,JunXin Road, Niuhu Community, Guanlan Street, Longhua District, Shenzhen(9F, building A,Xinlida Industrial Park)

2.3 Factory Information

Company Name:	Shenzhen Newman Hyde Intelligent Technology Co., Ltd
Address:	902, No.2500106, JunXin Road, Niuhu Community, Guanlan Street, Longhua District, Shenzhen(9F, building A,Xinlida Industrial Park)

2.4 General Description of Equipment under Test (EUT)

EUT Name	Portable Power Station
Under Test Model Name	PPS300W2
Series Model Name	NA
Description of Model name differentiation	NA
Hardware Version	NA
Software and Firmware Version	NA

2.5 Technical Information

Power Supply	Capacity:20.4Ah/14.4V,293.76Wh DC Input: DC 19V 3.15A USB-C Input: DC 5V 3A,9V 3A,12V 3A,15V 3A,20V 3A (PD 60W Max.) AC Output: 2 x 120Vac/60Hz 300W Max.(Peak 600W) DC Output: 2 x DC 12V 10A (10A Max.) Car Charger Outlet: 12V=--10A Max.(Shared DC Output) USB Output: DC 5V 3A,9V 2A,12V 1.5A USB Output:2 x DC 5V 2.4A USB-C Output: PD DC 5V 3A, 9V 3A,12V 3A,15V 3A,20V 3A (PD 60W Max.) Wireless Output:5W/10W Solar Panel Input: MPPT 12V-28V(60W Max)
Modulation Type	FSK
Frequency Range	The frequency block is 110.0 KHz to 205.0KHz.
Antenna Type	Coil antenna

All channel was listed on the following table:

Channel number	Freq. (KHz)	Channel number	Freq. (KHz)
1	142		
2			

3. Summary of Test Results

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 15, Subpart C	Intentional Radiators
2	ANSI C63.10-2013	American National Standard for Testing Unlicensed Wireless Devices

3.2 Summary of Test Result

No.	Description	FCC Part No.	Test Result	Test By	Verdict	Remark
1	Antenna Requirements	15.203	--	--	Pass	--
2	20dB Occupied Bandwidth	2.1049	ANNEX A.1	--	Pass	--
3	AC Power Line Conducted Emissions	15.207	ANNEX A.2	--	Pass	--
4	Spurious Emissions	15.209	ANNEX A.3	--	Pass	--

3.3 Uncertainty of Test

The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2 and TR100 028-1/-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Measurement	Value
Occupied Channel Bandwidth	69 KHz
RF output power, conducted	0.87 dB
Power Spectral Density, conducted	0.69 dB
Unwanted Emissions, conducted	0.94 dB
All emissions, radiated(<1GHz)	4.12 dB
All emissions, radiated(>1GHz)	4.16 dB
Temperature	0.82 °C
Humidity	4.1 %

4. Test Configuration

4.1 Environment Condition

Environment Parameter	Selected Values During Tests			
	Temperature	Voltage	Relative Humidity	Ambient Pressure
Normal Temperature, Normal Voltage (NTNV)	20°C to 25°C	10W	30% to 60%	100 kPa to 102 kPa

4.2 Test Equipment List

Conducted Method Test					
Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Shielding Room	YIHENG ENECTRONIC	5.5*3.1*3	YH-BT-220304-03	2022-03-03	2025-03-02
EXA Signal Analyzer	KEYSIGHT	N9020A	MY54230486	2023-06-12	2024-06-11
DC Power Supply	E3632A	E3642A	KR75304416	2023-06-12	2024-06-11
Attenuator	RswTech	SMA-JK-6dB	N/A	2023-06-12	2024-06-11
Attenuator	RswTech	SMA-JK-3dB	N/A	2023-06-12	2024-06-11
RF Control Unit	Techy	TR1029-1	N/A	2023-06-12	2024-06-11
RF Sensor Unit	Techy	TR1029-2	N/A	2023-06-12	2024-06-11
MXG Vector Signal Generator	Agilent	N5182A	US46240522	2023-06-12	2024-06-11
Programmable Temperature&Humidity Chamber	GRT	GR-HWX1000	GR22051001	2023-06-12	2024-06-11
Measurement Software	TACHOY	RF TestSoft	N/A	2023-06-12	2024-06-11

Radiated Method Test					
Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
3m Semi-Anechoic Chamber	YIHENG ENECTRONIC	966	YH-BT-220304-01	2022-05-06	2025-05-05
EMI Test Receiver	Rohde&Schwarz	ESCI	100694	2023-06-12	2024-06-11
TRILOG Broadband Antenna	Schwarzbeck	VULB 9168	01324	2022-06-15	2025-06-14
Pre-Amplifier	Schwarzbeck	BBV 9745	#180	2023-06-12	2024-06-11
Measurement Software	Fara	EZ_EMC Ver. FA-03A2	N/A	N/A	N/A

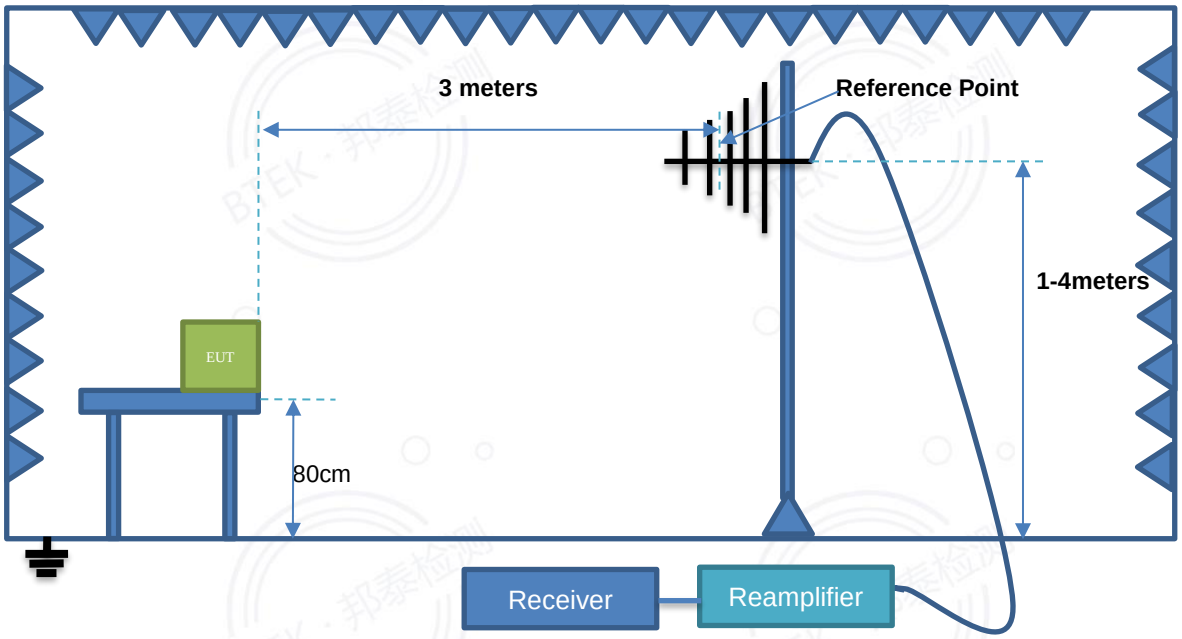
Conducted disturbance Test					
Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Shielding Room	YIHENG ENECTRONIC	9*5*3.3	YH-BT-220304-04	2022-03-03	2025-03-02
EMI Test Receiver	Rohde&Schwarz	ESCI	101021	2023-06-12	2024-06-11
Measurement Software	Fara	EZ_EMC Ver. FA-03A2	N/A	N/A	N/A
LISN	Rohde&Schwarz	ENV216	101472	2023-06-12	2024-06-11
LISN	Schwarzbeck	NSLK 8128	05127	2023-06-12	2024-06-11

4.3 Test Auxiliary Equipment

Description	Manufacturer	Model	Serial No.	Length	Description	Use
WPC charging load	EESON	2S	/	/	/	☒

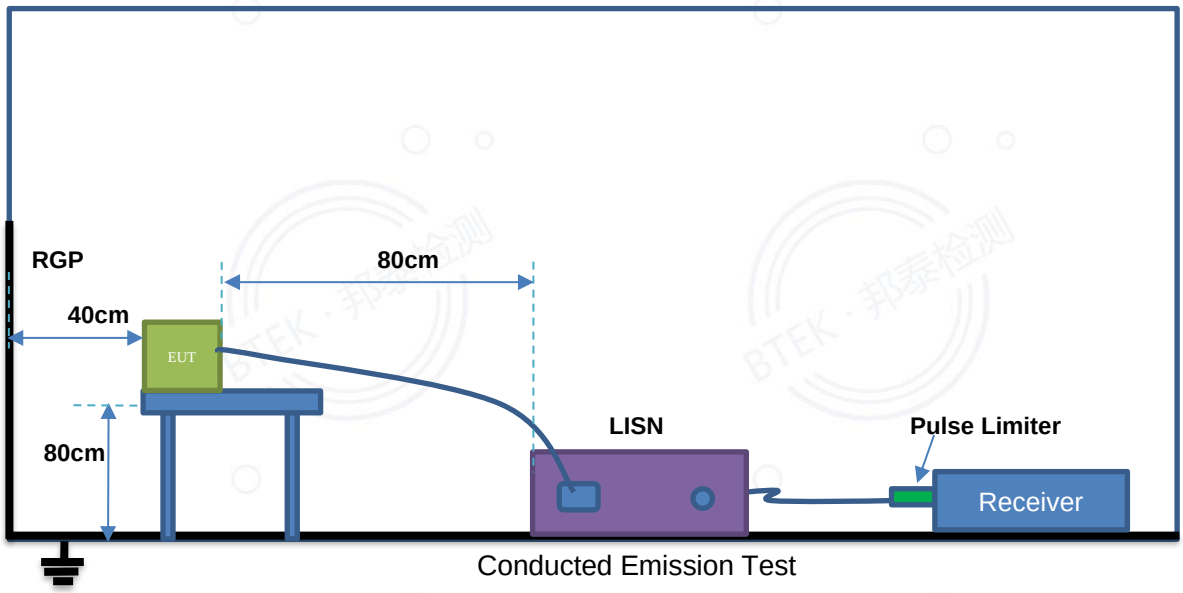
4.4 Test Setup

Test Setup 1



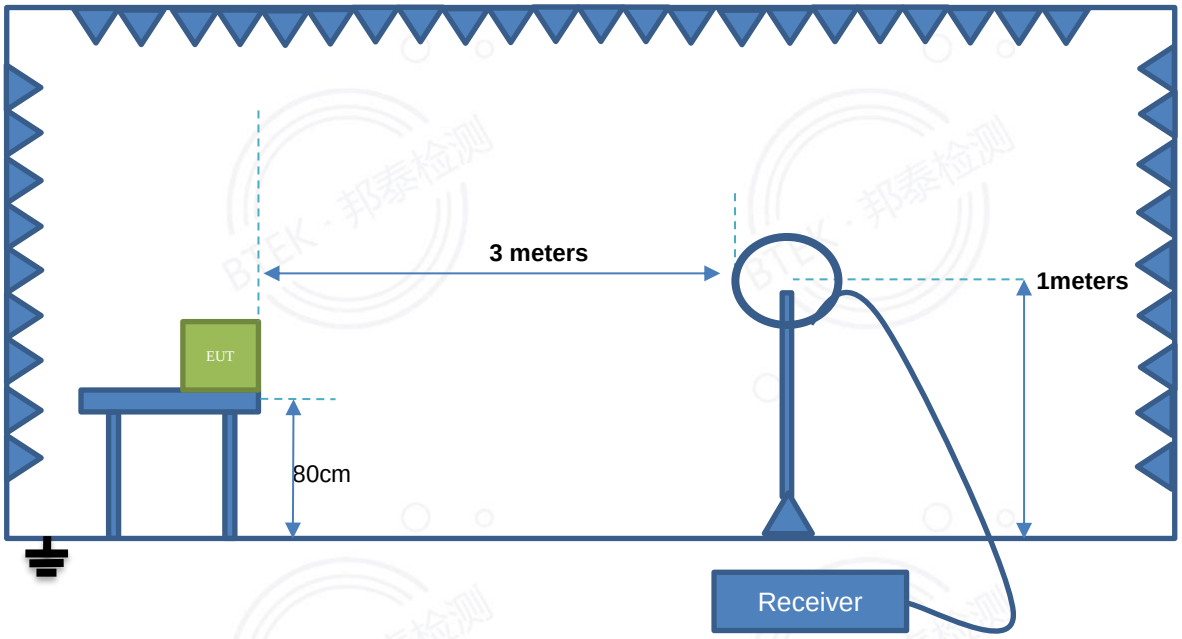
Radiation Test (30MHz – 1GHz)

Test Setup 2



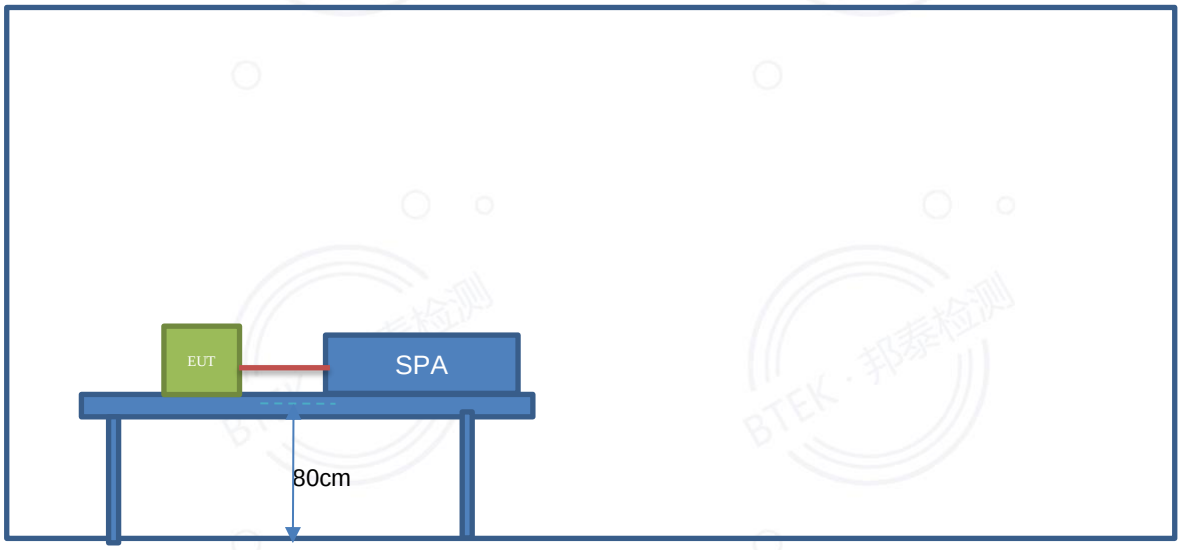
Conducted Emission Test

Test Setup 3



Radiation Test (9k - 30MHz)

Test Setup 4



5. Test Items

5.1 Antenna Requirements

FCC §15.203; RSS-247, 5.4(f)

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of § 15.211, § 15.213, § 15.217, § 15.219, or § 15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

If directional gain of transmitting antennas is greater than 6 dBi, the power shall be reduced by the same level in dB comparing to gain minus 6 dBi. For the fixed point-to-point operation, the power shall be reduced by one dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the FCC rule.

The EUT uses an Integral Antenna which in accordance to Section 15.203 is considered sufficient to comply with the provisions of this section.

5.2 20dB Occupied Bandwidth

5.2.1 Limit

FCC Part 2.1049.

5.2.2 Test Setup

See section 4.4 for test setup 4 description for the antenna port. The photo of test setup please refer to ANNEX B

5.2.3 Test Procedure

1. The transmitter output was connected to the spectrum analyzer through an attenuator, the pathloss was compensated to the results for each measurement.
2. Set to the maximum power setting and enable the EUT transmit continuously
3. Use the following spectrum analyzer settings:
   Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a hopping channel
   RBW≥1% of the 20 dB bandwidth, VBW ≥ RBW
   Sweep = auto, Detector function = peak, Trace = max hold
4. Measure and record the results in the test report.

5.2.4 Test Result

Please refer to ANNEX A.1

5.3 AC Power Line Conducted Emissions

5.3.1 Limit

FCC §15.207

For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50μH/50Ω line impedance stabilization network (LISN).

Frequency range (MHz)	Conducted Limit (dBμV)	
	Quai-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
0.50 - 30	60	50

5.3.2 Test Setup

See section 4.4 for test setup description for setup 2. The photo of test setup please refer to ANNEX B

5.3.3 Test Procedure

The maximum conducted interference is searched using Peak (PK), if the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed. Refer to recorded points and plots below.

Devices subject to Part 15 must be tested for all available U.S. voltages and frequencies (such as a nominal 120 VAC, 50/60 Hz and 240 VAC, 50/60 Hz) for which the device is capable of operation. A device rated for 50/60 Hz operation need not be tested at both frequencies provided the radiated and line conducted emissions are the same at both frequencies.

5.3.4 Test Result

Please refer to ANNEX A.2

NOTE:

1. Results (dBuV) = Reading (dBuV) + Factor (dB)
   The reading level is calculated by software which is not shown in the sheet
2. Factor = Insertion loss + Cable loss
3. Over limit = Results – Limit.

5.4 Radiated Spurious Emission

5.4.1 Limit

FCC §15.209&15.247(d) ; RSS-247, 5.5

Radiated emission outside the frequency band attenuation below the general limits specified in FCC section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in FCC section 15.205(a), must also comply with the radiated emission limits specified in FCC section 15.209(a). According to FCC section 15.209 (a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

Note:

1. Field Strength (dBμV/m) = 20*log[Field Strength (μV/m)].
2. In the emission tables above, the tighter limit applies at the band edges.
3. For Above 1000 MHz, the emission limit in this paragraph is based on measurement instrumentation employing an average detector, measurement using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit.
4. For above 1000 MHz, limit field strength of harmonics: 54dBuV/m@3m (AV) and 74dBuV/m@3m (PK).

5.4.2 Test Setup

See section 4.4 for test setup description for setup 1 and 3. The photo of test setup please refer to ANNEX B

5.4.3 Test Procedure

Since the emission limits are specified in terms of radiated field strength levels, measurements performed to demonstrate compliance have traditionally relied on a radiated test configuration. Radiated measurements remain the principal method for demonstrating compliance to the specified limits; however antenna-port conducted measurements are also now acceptable to demonstrate compliance (see below for details). When radiated measurements are utilized, test site requirements and procedures for maximizing and measuring radiated emissions that are described in ANSI C63.10 shall be followed.

Antenna-port conducted measurements may also be used as an alternative to radiated measurements for demonstrating compliance in the restricted frequency bands. If conducted measurements are performed, then proper impedance matching must be ensured and an additional radiated test for cabinet/case spurious emissions is required.

General Procedure for conducted measurements in restricted bands:

a) Measure the conducted output power (in dBm) using the detector specified (see guidance regarding measurement procedures for determining quasi-peak, peak, and average conducted output power, respectively).

b) Add the maximum transmit antenna gain (in dBi) to the measured output power level to determine the EIRP level (see guidance on determining the applicable antenna gain)

c) Add the appropriate maximum ground reflection factor to the EIRP level (6 dB for frequencies ⩽ 30 MHz, 4.7 dB for frequencies between 30 MHz and 1000 MHz, inclusive and 0 dB for frequencies > 1000 MHz).

d) For devices with multiple antenna-ports, measure the power of each individual chain and sum the EIRP of all chains in linear terms (e.g., Watts, mW).

e) Convert the resultant EIRP level to an equivalent electric field strength using the following relationship:

E = EIRP – 20log D + 104.8

where:

E = electric field strength in dBμV/m,

EIRP = equivalent isotropic radiated power in dBm D = specified measurement distance in meters.

f) Compare the resultant electric field strength level to the applicable limit.

g) Perform radiated spurious emission test.

Quasi-Peak measurement procedure

The specifications for measurements using the CISPR quasi-peak detector can be found in Publication 16 of the International Special Committee on Radio Frequency Interference (CISPR) of the International Electrotechnical Commission.

As an alternative to CISPR quasi-peak measurement, compliance can be demonstrated to the applicable emission limits using a peak detector.

Peak power measurement procedure:

Peak emission levels are measured by setting the instrument as follows:

a)RBW = as specified in Table 1.

b)VBW ⩾ 3 x RBW.

c)Detector = Peak.

d)Sweep time = auto.

e)Trace mode = max hold.

f)Allow sweeps to continue until the trace stabilizes. (Note that the required measurement time may be longer for low duty cycle applications).

Table 1—RBW as a function of frequency

Frequency	RBW
9-150 kHz	200-300 Hz
0.15-30 MHz	9-10 kHz
30-1000 MHz	100-120 kHz
> 1000 MHz	1 MHz

If the peak-detected amplitude can be shown to comply with the average limit, then it is not necessary to perform a separate average measurement.

Trace averaging across on and off times of the EUT transmissions followed by duty cycle correction:

If continuous transmission of the EUT (i.e., duty cycle ≥ 98 percent) cannot be achieved and the duty cycle is constant (i.e., duty cycle variations are less than ± 2 percent), then the following procedure shall be used:

a) The EUT shall be configured to operate at the maximum achievable duty cycle.

b) Measure the duty cycle, x, of the transmitter output signal as described in section 6.0.

c) RBW = 1 MHz (unless otherwise specified).

d) VBW ≥ 3 x RBW.

e) Detector = RMS, if span/(# of points in sweep) ≤ (RBW/2). Satisfying this condition may require increasing the number of points in the sweep or reducing the span. If this condition cannot be satisfied, then the detector mode shall be set to peak.

f) Averaging type = power (i.e., RMS).

1) As an alternative, the detector and averaging type may be set for linear voltage averaging.

2) Some instruments require linear display mode in order to use linear voltage averaging. Log or dB averaging shall not be used.

g) Sweep time = auto.

h) Perform a trace average of at least 100 traces.

i) A correction factor shall be added to the measurement results prior to comparing to the emission limit in order to compute the emission level that would have been measured had the test been performed at 100 percent duty cycle. The correction factor is computed as follows:

1) If power averaging (RMS) mode was used in step f), then the applicable correction factor is 10 log(1/x), where x is the duty cycle.

2) If linear voltage averaging mode was used in step f), then the applicable correction factor is 20 log(1/x), where x is the duty cycle.

3) If a specific emission is demonstrated to be continuous (≥ 98 percent duty cycle) rather than turning on and off with the transmit cycle, then no duty cycle correction is required for that emission.

NOTE: Reduction of the measured emission amplitude levels to account for operational duty factor is not permitted. Compliance is based on emission levels occurring during transmission - not on an average across on and off times of the transmitter.

Determining the applicable transmit antenna gain:

A conducted power measurement will determine the maximum output power associated with a restricted band emission; however, in order to determine the associated EIRP level, the gain of the transmitting antenna (in dBi) must be added to the measured output power (in dBm).

Since the out-of-band characteristics of the EUT transmit antenna will often be unknown, the use of a conservative antenna gain value is necessary. Thus, when determining the EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2 dBi, whichever is greater. However, for devices that operate in multiple frequency bands while using the same transmit antenna, the highest gain of the antenna within the operating band nearest in frequency to the restricted band emission being measured may be used in lieu of the overall highest gain when the emission is at a frequency that is within 20 percent of the nearest band edge frequency, but in no case shall a value less than 2 dBi be used.

See KDB 662911 for guidance on calculating the additional array gain term when determining the effective antenna gain for a EUT with multiple outputs occupying the same or overlapping frequency ranges in the same band.

Radiated spurious emission test:

An additional consideration when performing conducted measurements of restricted band emissions is that unwanted emissions radiating from the EUT cabinet, control circuits, power leads, or intermediate circuit elements will likely go undetected in a conducted measurement configuration. To address this concern, a radiated test shall be performed to ensure that emissions emanating from the EUT cabinet (rather than the antenna port) also comply with the applicable limits.

For these cabinet radiated spurious emission measurements the EUT transmit antenna may be replaced with a termination matching the nominal impedance of the antenna. Procedures for performing radiated measurements are specified in ANSI C63.10. All detected emissions shall comply with the applicable limits.

The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. Mid channels on all channel bandwidth verified. Only the worst RB size/offset presented.

The power of the EUT transmitting frequency should be ignored.

All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

Use the following spectrum analyzer settings:

Span = wide enough to fully capture the emission being measured RBW = 1 MHz for f ⩾ 1 GHz, 100 kHz for f < 1 GHz

VBW ⩾ RBW

Sweep = auto

Detector function = peak Trace = max hold

5.4.4 Test Result

Please refer to ANNEX A.3

NOTE:

1. Results (dBuV) = Reading (dBuV) + Factor (dB)

The reading level is calculated by software which is not shown in the sheet

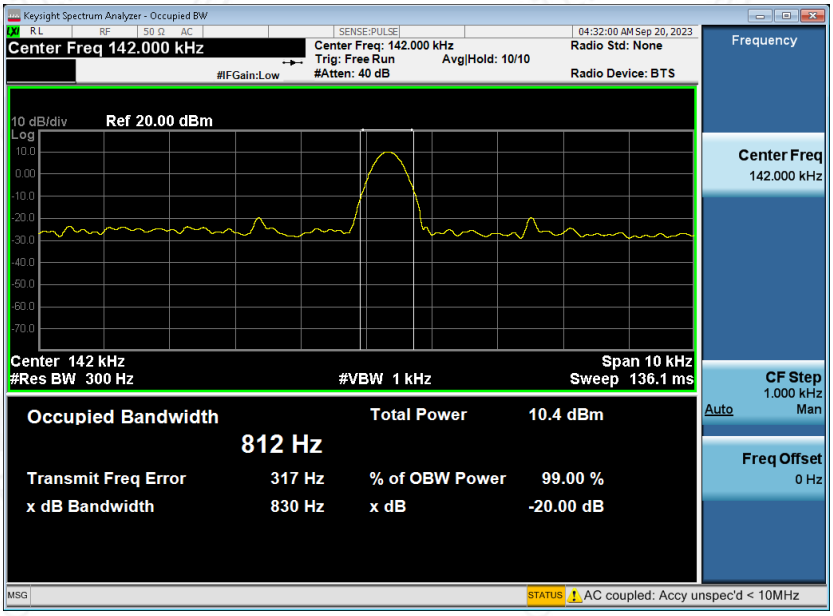
2. Factor = Insertion loss + Cable loss
3. Over limit = Results – Limit.

ANNEX A Test Results

A.1 20dB Occupied Bandwidth

Freq. (kHz)	20 dB bandwidth Result (kHz)	Conclusion
142	0.830	PASS

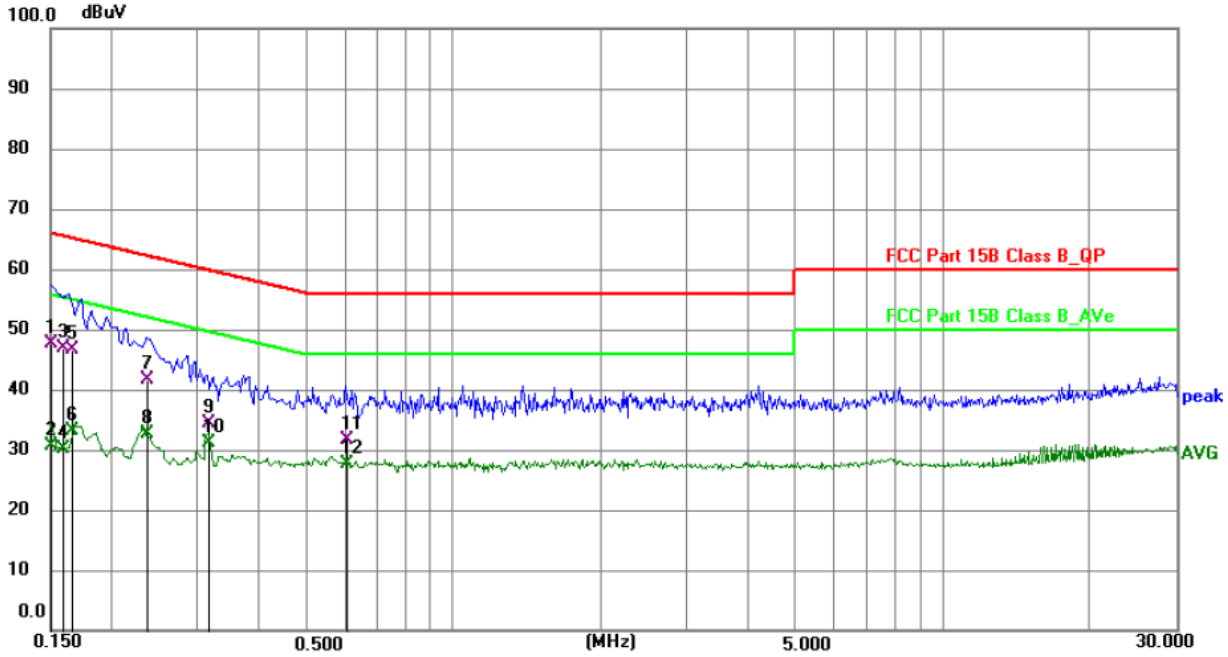
142KHz:



A.2 AC Power Line Conducted Emissions

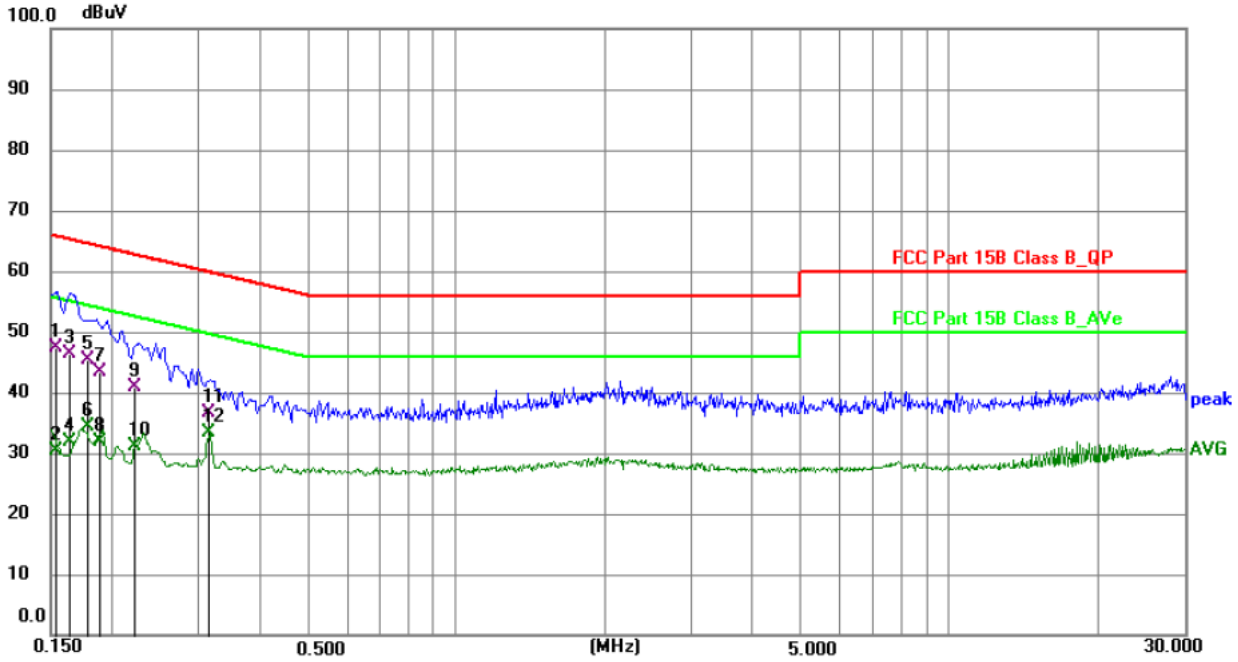
Note:Results (dBuV) = Reading (dBuV) + Factor (dB)

Line: Live line



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1503	27.83	19.75	47.58	65.98	-18.40	QP	P	
2	0.1503	10.90	19.75	30.65	55.98	-25.33	AVG	P	
3	0.1597	27.05	19.75	46.80	65.48	-18.68	QP	P	
4	0.1597	10.47	19.75	30.22	55.48	-25.26	AVG	P	
5	0.1662	26.91	19.77	46.68	65.15	-18.47	QP	P	
6	0.1662	13.31	19.77	33.08	55.15	-22.07	AVG	P	
7	0.2366	21.90	19.80	41.70	62.21	-20.51	QP	P	
8	0.2366	12.84	19.80	32.64	52.21	-19.57	AVG	P	
9	0.3181	14.55	19.82	34.37	59.76	-25.39	QP	P	
10	0.3181	11.20	19.82	31.02	49.76	-18.74	AVG	P	
11	0.6053	11.80	19.87	31.67	56.00	-24.33	QP	P	
12 *	0.6053	7.88	19.87	27.75	46.00	-18.25	AVG	P	

Line: Neutral Line



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1537	27.60	19.77	47.37	65.80	-18.43	QP	P	
2	0.1537	10.62	19.77	30.39	55.80	-25.41	AVG	P	
3	0.1642	26.72	19.77	46.49	65.25	-18.76	QP	P	
4	0.1642	12.03	19.77	31.80	55.25	-23.45	AVG	P	
5	0.1780	25.54	19.79	45.33	64.58	-19.25	QP	P	
6	0.1780	14.50	19.79	34.29	54.58	-20.29	AVG	P	
7	0.1884	23.59	19.80	43.39	64.11	-20.72	QP	P	
8	0.1884	12.14	19.80	31.94	54.11	-22.17	AVG	P	
9	0.2226	21.13	19.82	40.95	62.72	-21.77	QP	P	
10	0.2226	11.29	19.82	31.11	52.72	-21.61	AVG	P	
11	0.3126	16.70	19.83	36.53	59.90	-23.37	QP	P	
12 *	0.3126	13.63	19.83	33.46	49.90	-16.44	AVG	P	

A.3 Radiated Spurious Emission

9 kHz ~ 30 MHz

Test Frequency:9K-150K

Freq (MHz)	Cable_ Loss (dB)	Antenna_Factor (dB/m)	Preamp_ Gain (dB)	Read_ Level (dBuA)	Level (dBuA/m)	Limit_ Line (dBuA/m)	Over_ Limit (dB)	Detector
0.0264	2.24	17.7	31.53	76.81	65.25	119.17	-53.92	peak
0.0264	2.24	17.7	31.53	66.79	55.27	119.17	-63.9	Average
0.0354	2.31	17.8	32.54	79.36	66.94	116.62	-49.68	peak
0.0354	2.31	17.8	32.54	68.13	55.75	116.62	-60.87	Average
0.0621	2.39	17.9	31.69	58.46	47.07	111.74	-64.67	peak
0.0621	2.39	17.9	31.69	53.69	42.21	111.74	-69.53	Average
0.0752	2.45	17.7	31.77	49.64	38.08	110.08	-72	peak
0.0752	2.45	17.7	31.77	44.13	32.53	110.08	-77.55	Average
0.0658	2.51	18.1	31.89	48.66	37.38	111.24	-73.86	peak
0.0658	2.51	18.1	31.89	45.34	34.08	111.24	-77.16	Average
0.1256	2.87	18.2	32.34	83.69	72.42	105.62	-33.2	peak
0.1256	2.87	18.2	32.34	76.85	65.54	95.69	-30.15	Average

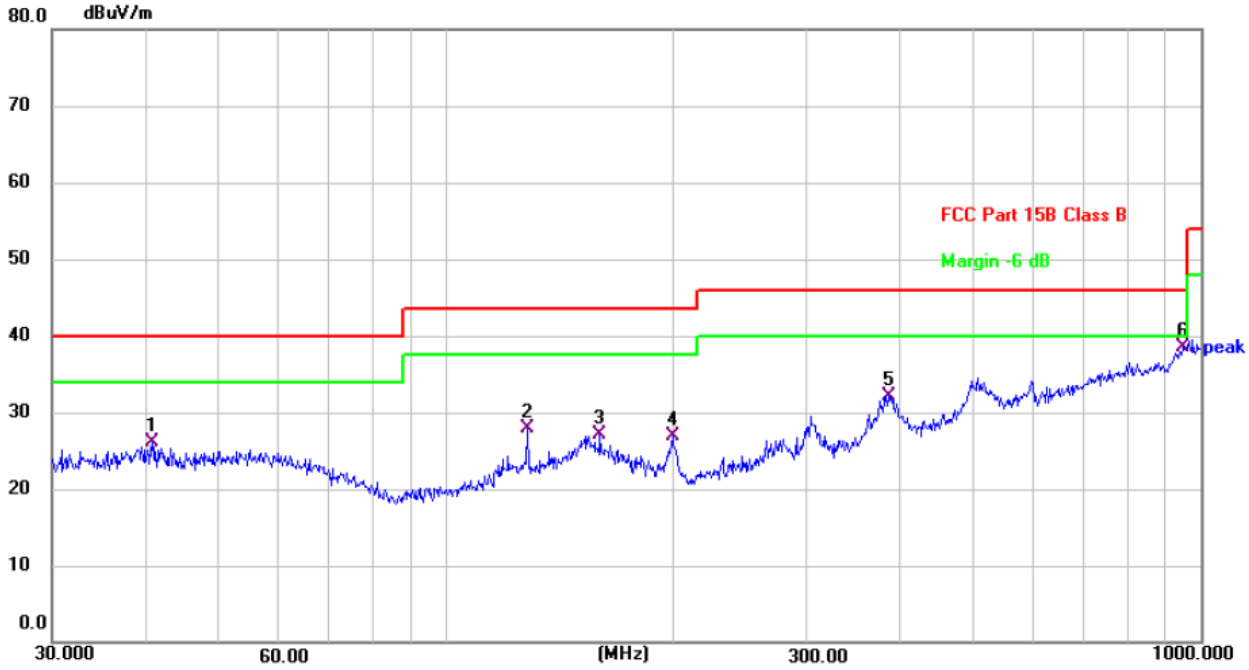
Test Frequency:150K-30Mz

Freq (MHz)	Cable_ Loss (dB)	Antenna_Factor (dB/m)	Preamp_ Gain (dB)	Read_ Level (dBuA)	Level (dBuA/m)	Limit_ Line (dBuA/m)	Over_ Limit (dB)	Detector
0.3941	2.94	22.36	33.66	61.59	53.28	95.69	-42.41	peak
0.3941	2.94	22.36	33.66	56.98	48.67	95.69	-47.02	Average
0.6954	3.02	24.19	33.89	49.63	42.96	70.76	-27.8	QP
0.9423	3.06	26.34	33.89	43.65	39.16	68.12	-28.96	QP
1.1986	3.05	27.46	33.78	41.19	37.92	66.03	-28.11	QP
2.6549	3.08	29.31	33.64	37.65	36.40	69.54	-33.14	QP
7.6451	3.23	28.69	33.94	36.89	34.84	69.54	-34.7	QP

30 MHz ~ 1GHz

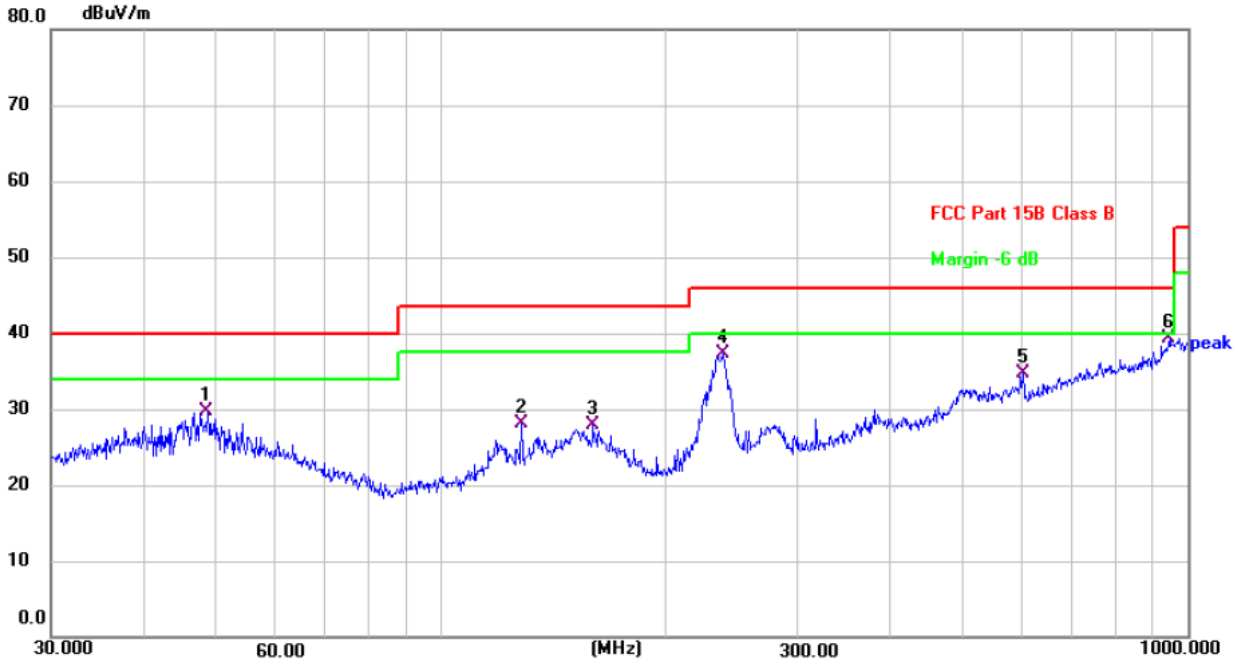
Note:Results (dBuV) = Reading (dBuV) + Factor (dB)

Polarity: Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	40.7016	43.15	-17.03	26.12	40.00	-13.88	QP	300	101	P	
2	128.1130	46.23	-18.26	27.97	43.50	-15.53	QP	300	238	P	
3	159.7844	44.30	-17.23	27.07	43.50	-16.43	QP	100	322	P	
4	199.2855	48.29	-21.42	26.87	43.50	-16.63	QP	300	349	P	
5	385.2804	47.78	-15.67	32.11	46.00	-13.89	QP	100	259	P	
6 *	945.4400	45.52	-7.04	38.48	46.00	-7.52	QP	300	349	P	

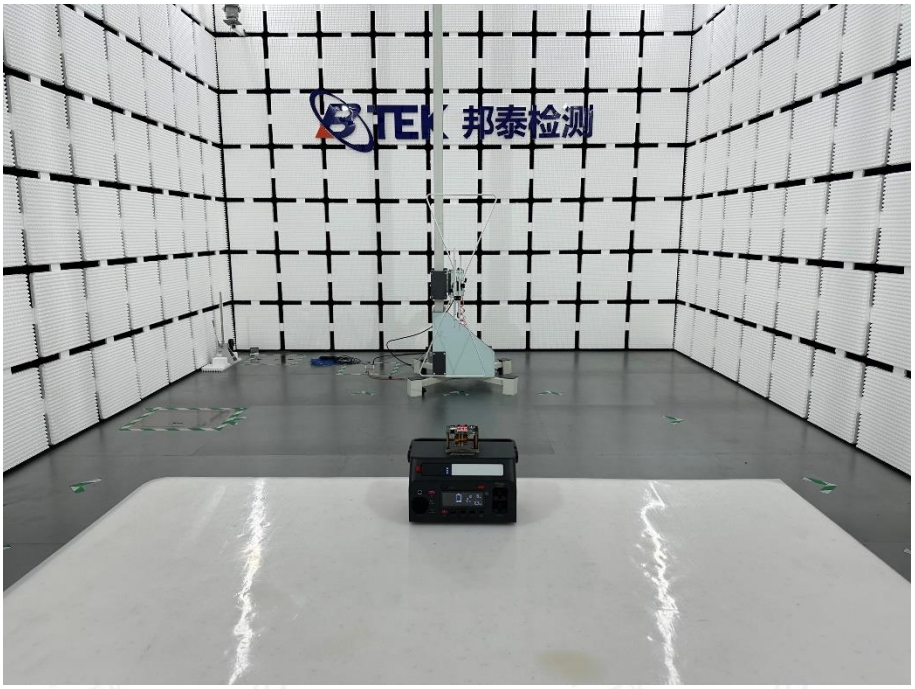
Polarity: Vertical



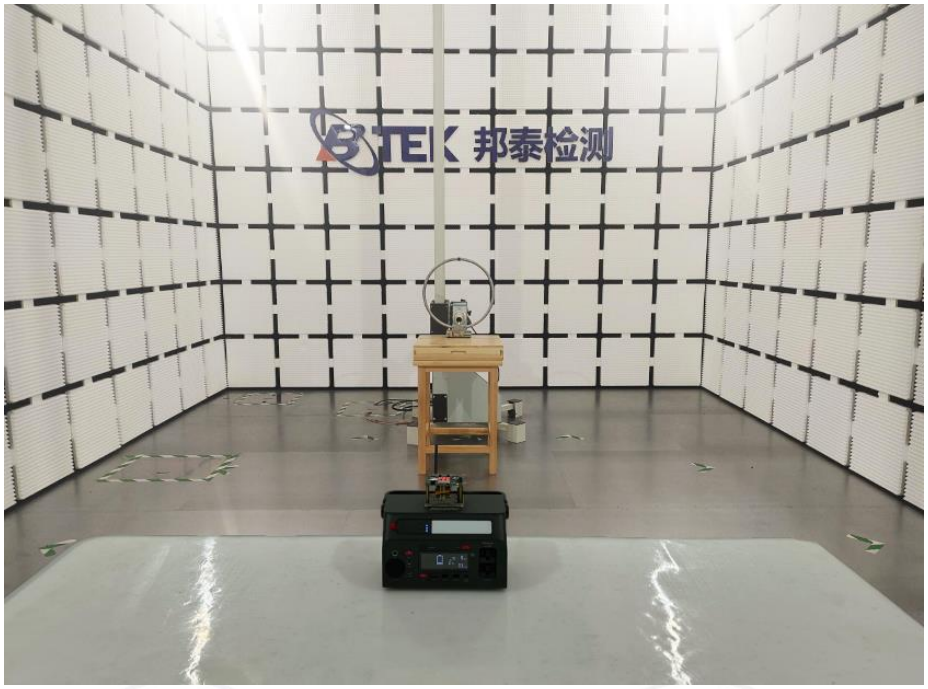
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	48.6719	47.36	-17.64	29.72	40.00	-10.28	QP	100	186	P	
2	128.1130	46.32	-18.26	28.06	43.50	-15.44	QP	200	348	P	
3	159.7844	45.23	-17.23	28.00	43.50	-15.50	QP	100	223	P	
4	238.3102	56.48	-19.18	37.30	46.00	-8.70	QP	100	323	P	
5	601.4265	46.17	-11.53	34.64	46.00	-11.36	QP	100	161	P	
6 *	945.4399	46.37	-7.04	39.33	46.00	-6.67	QP	300	9	P	

ANNEX BTEST SETUP PHOTOS

Radiated Emissions



Radiated Emissions



Power Line Conducted Emissions

ANNEX C EUT EXTERNAL PHOTOS

Please refer to the External Appendix EUT Photos.

ANNEX D EUT INTERNAL PHOTOS

Please refer to the Internal Appendix EUT Photos.

--END OF REPORT--