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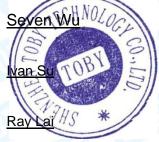
FCC Part 15B Test Report

FCC ID:2AXQX-4001340

Report No.	-	TBR-C-202204-0403-101
Applicant	1	Marpac, LLC
Equipment Under T	est	(EUT)
EUT Name	81	Rohm Voyager, Rohm+
Model No.	:	4001340
Series Model No.	:	4001341
Brand Name	>:	Yogasleep
Receipt Date	-	2022-07-10
Test Date	:	2022-07-10 to 2022-07-25
Issue Date	:	2022-07-28
Standards	19	FCC 47 CFR Part 15 Subpart B
Conclusions	:	PASS
		In the configuration tested, the EUT complied with the standards specified above
		The EUT technically complies with the FCC requirements
Test/Witness		So for any Country
Engineer		Seven WUNDLOGA
Engineer Superviso	or	: INAN SU

Authorized Signatory





This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in the report.



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Revision History

Report No.	Version	Description	Issued Date
TBR-C-202204-0403-101	Rev.01	Initial issue of report	2022-07-28
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1. General Information

1.1 Client Information

Applicant	:	Marpac, LLC	
Address	:	5 Capital Drive, Wilmington, NC 28405	
Manufacturer	2	Shen zhen Hi-FiD Electronics Tech Co., Ltd	
Address		4F~ 5F B7 & 3F B17, Hengfeng Industrial Town, Zhoushi Road, Bao'an District, Shenzhen City, China. 518126.	

1.2 General Description of EUT (Equipment Under Test)

EUT Name	-	Rohm Voyager, Rohm+
Model(s)		4001340, 4001341
Model Difference	:	All PCB boards and circuit diagrams are the same, the only difference is that appearance color.
Fx		2.480GHz
Power Supply(TX)		Input: DC 5V DC 3.7V by 1200mAh Rechargeable Li-ion battery
Software Version	:	
Hardware Version	51	
Equipment	-	Class A 🖂 Class B
	the E	Equipment is not intended primarily for use in a residential

environment. Class B Equipment: the Equipment is intended primarily for use in a residential environment. Fx: Highest frequency generated or used in the device or on which the device operates or tunes (MHz).



1.3 Block Diagram Showing The Configuration of System Tested

Mode 1	081						
	- 10	120		U.S.	En		mB1
4	Adapter	E	UT				
							1
				o al Princip	6.1112		
Mode 2	OB						
				U.C.	1	U	and l
	Adapter	┘ ├	WPT				
			EUT				
CUL.		NU			4		
Mode 3	[TOB						
			EUT	CHIL			110
							R
	and a	5 00	(in)	-	NU S	1	U

1.4 Description of Support Units

	Equipment Information				
Name	Model	S/N	Manufacturer	Used " √ "	
Adapter		085	HUAWEI	\checkmark	
				\checkmark	
	Cable Information				
Number	Shielded Type	Ferrite Core	Length	Note	
Cable			1.05m		





1.5 Description of Test Mode

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned follow was evaluated respectively.

Pretest Mode	Description	
Mode 1	Charging Mode (Adapter)	5
Mode 2	Charging Mode (WPT)	X
Mode 3	BT Link Mode	0

The EUT system operated these modes were found to be the worst case during the pre-scanning test as Following:

	For Conducted Test
Final Test Mode	Description
Mode 1	Charging Mode (Adapter)
Mode 2	Charging Mode (WPT)
Mode 3	BT Link Mode
·	For Radiated Test
Final Test Mode	Description
Mode 1	Charging Mode (Adapter)
Mode 2	Charging Mode (WPT)
Mode 3	BT Link Mode

1.6 Test standards

The objective is to determine compliance with FCC Part 15, Subpart B, and section 15.107, 15.109 rules.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product, which result in lowering the emission, should be checked to ensure compliance has been maintained.



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1.7 Test Facility

The testing report were performed by the Shenzhen Toby Technology Co., Ltd., in their facilities located at 1/F.,Building 6, Rundongsheng Industrial Zone, Longzhu, Xixiang, Bao'an District, Shenzhen, Guangdong, China. At the time of testing, the following bodies accredited the Laboratory:

CNAS (L5813)

The Laboratory has been accredited by CNAS to ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories for the competence in the field of testing. And the Registration No.: CNAS L5813.

A2LA Certificate No.: 4750.01

The laboratory has been accredited by American Association for Laboratory Accreditation(A2LA) to ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories for the technical competence in the field of Electrical Testing. And the A2LA Certificate No.: 4750.01.FCC Accredited Test Site Number: 854351. Designation Number: CN1223.

IC Registration No.: (11950A)

The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing. The site registration: Site# 11950A. CAB identifier: CN0056.

1.8 Measurement Uncertainty

The reported uncertainty of measurement $y \pm U$, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

Test	Parameters	Expanded Uncertainty (U _{Lab})	Expanded Uncertainty (U _{Cispr})
Conducted Emission	Level Accuracy: 9kHz~150kHz 150kHz to 30MHz	\pm 3.50 dB \pm 3.10 dB	±4.0 dB ±3.6 dB
Radiated Emission	Level Accuracy: Above 1000MHz	±4.50 dB	N/A
Radiated Emission	Level Accuracy: 30MHz to 1000 MHz	\pm 4.40 dB	±5.2 dB

2. Test Software

	Test Item	Test Software	Manufacturer	Version No.
	Conducted Emission	EZ-EMC	EZ	CDI-03A2
1	Radiation Emission	EZ-EMC	EZ	FA-03A2RE

3. Test Summary

Test Items	Test Requirement	Test Method	Result
Conducted Emission	FCC 47 CFR Part 15 Section 15.107	ANSI C63.4-2014	Pass
Radiated Emission	FCC 47 CFR Part 15 Section 15.109	ANSI C63.4-214	Pass

4. Test Equipment Used

Conducted Emission Test							
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date		
EMI Test Receiver	Rohde & Schwarz	ESCI	100321	Jun. 23, 2022	Jun. 22, 2023		
RF Switching Unit	Compliance Direction Systems Inc	RSU-A4	34403	Jun. 23, 2022	Jun. 22, 2023		
AMN	SCHWARZBECK	NNBL 8226-2	8226-2/164	Jun. 22, 2022	Jun. 21, 2023		
LISN	Rohde & Schwarz	ENV216	101131	Jun. 22, 2022	Jun. 21, 2023		
Radiation Emissio	on Test						
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date		
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jun. 23, 2022	Jun. 22, 2023		
EMI Test Receiver	Rohde & Schwarz	ESPI	100010/007	Jun. 23, 2022	Jun. 22, 2023		
Bilog Antenna	ETS-LINDGREN	3142E	00117537	Feb. 27, 2022	Feb.26, 2024		
Horn Antenna	ETS-LINDGREN	3117	00143207	Feb. 26, 2022	Feb.25, 2024		
Horn Antenna	SCHWARZBECK	BBHA 9170	1118	Feb. 26, 2022	Feb.25, 2024		
Loop Antenna	SCHWARZBECK	FMZB 1519 B	1519B-059	Feb. 26, 2022	Feb.25, 2024		
Pre-amplifier	SONOMA	310N	185903	Feb. 26, 2022	Feb.25, 2023		
Pre-amplifier	HP	8449B	3008A00849	Feb. 26, 2022	Feb.25, 2023		
HF Amplifier	Tonscend	TAP0184050	AP21C806129	Sep. 03, 2021	Sep. 02, 2022		



5. Label Requirements & Statement Requirements

Class B

Label Requirements

Class B digital device subject to certification by the FCC shall carry a warning label which includes the following statement:

* * * W A R N I N G * * *

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Class A Statement Requirements

The operator's manual for a Class A digital device shall contain the following statements or their equivalent:

* * * W A R N I N G * * *

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment This equipment generates, uses, and can radiate radio frequency energy and, if not installed and uses in accordance with the instruction manual, may cause harmful interference to radio communications Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. Notice: The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equivalent.

If the EUT was tested with special shielded cables the operator's manual for such product shall also contain the following statements or their equivalent: Shielded interface cables and/or AC power cord, if any, must be used in order to comply with the emission limits.

* * * * * * * * *



6. Conducted Emission Test

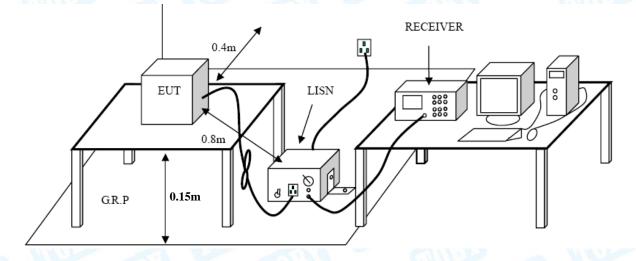
- 6.1 Test Standard and Limit
- 6.1.1 Test Standard FCC Part 15.107
- 6.1.2. Test Limit

Conducted Emission Test Limit (Class A)					
Frequency	Maximum RF Line Voltage (dBμV)				
(MHz)	Quasi-peak Level	Average Level			
0.15~0.50	79	66			
0.50~30	73	60			

Conducted Emission Test Limit (Class B)

	Frequency	Maximum RF Line Voltage (dBµV)			
	(MHz)	Quasi-peak Level	Average Level		
	0.15~0.5	66 ~ 56 *	56 ~ 46 *		
600	0.50~5	56	46		
63	5~30	60	50		

6.2 Test Setup





6.3 Test Procedure

The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.

The cables shall be insulated (by up to 15 cm) from the horizontal ground reference plane, and shall be folded back and forth in the center forming a bundle 30 to 40 cm long.

I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.

LISN at least 80 cm from nearest part of EUT chassis.

The bandwidth of EMI test receiver is set at 9kHz, and the test frequency band is from 0.15MHz to 30MHz.

6.4 Deviation From Test Standard

No deviation

6.5 Test Data

Please refer to the Attachment A.



7. Radiated Emission Test

- 7.1 Test Standard and Limit
- 7.1.1 Test Standard
 - FCC Part 15.109
- 7.1.2 Test Limit

Frequency MHz	Field Strengths Limits dB(μV/m)
30 ~ 88	49.0
88~216	53.5
216~960	56.4
Above 960	59.5
Frequency	
Frequency MHz	Field Strengths Limits dB(µV/m)
Frequency	Field Strengths Limits
Frequency MHz 30 ~ 88	Field Strengths Limits dB(μV/m) 40.0

* The lower limit shall apply at the transition frequency.

* The test distance is 3m.

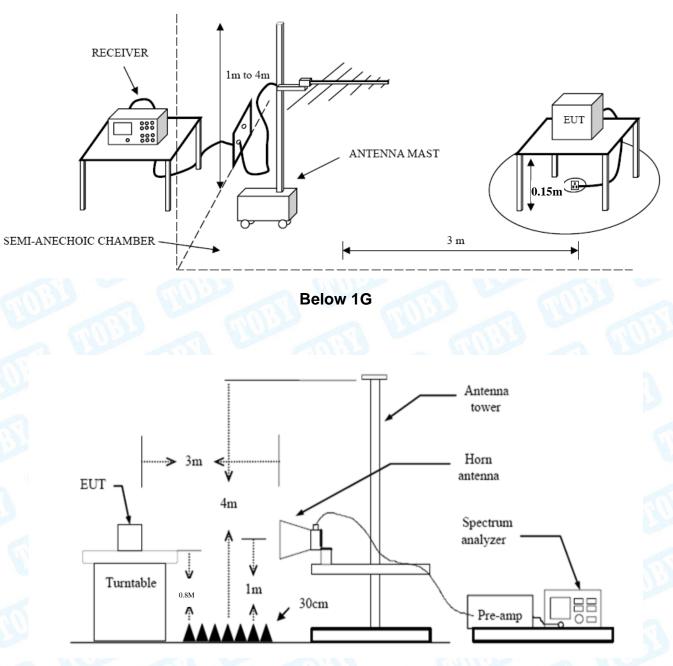
Erequency (MHz)	Class A Radiated Limit (dBµV/m)- Distance of 3 metres			
Frequency (MHz)	Linear Average Detector	Peak Detector		
>1000	59.5	79.5		
	Class B Radiated Limit (dBµV/m)-Distance of 3 metres			
Frequency (MHz)	Linear Average Detector	Peak Detector		
>1000	54	74		

Highest Frequency Generated	Upper Frequency of
or Used in Device	Radiated Measurement
Below 1.705 MHz	No radiated testing required
1.705 MHz – 108 MHz	1 GHz
108 MHz - 500 MHz	2 GHz
500 MHz – 1 GHz	5 GHz
Above 1 GHz	5 th harmonic of the highest frequency or 40 GHz, whichever is
	lower.



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7.2 Test Setup



Above 1G



7.3 Test Procedure

The EUT was placed on the top of a rotating table which is 0.8 meters above the ground. EUT is set 3.0 meters away from the receiving antenna that mounted on a antenna tower. The table was rotated 360 degrees to determine the position of the highest radiation, the antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

Measurements shall be made with a quasi-peak measuring receiver in the frequency range 30MHz to 1000MHz. If the Peak Mode measured value compliance with and lower than quasi-peak mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. Measurements shall be made with a Peak and AVG measuring receiver in the frequency range Above 1000MHz.

7.4 Deviation From Test Standard

No deviation

7.5 Test Data

Please refer to the Attachment B.



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8. Photographs - Constructional Details

Photo 1 Appearance of EUT



Photo 2 Appearance of EUT





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Photo 3 Appearance of EUT



Photo 4 Appearance of EUT





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Photo 5 Appearance of EUT

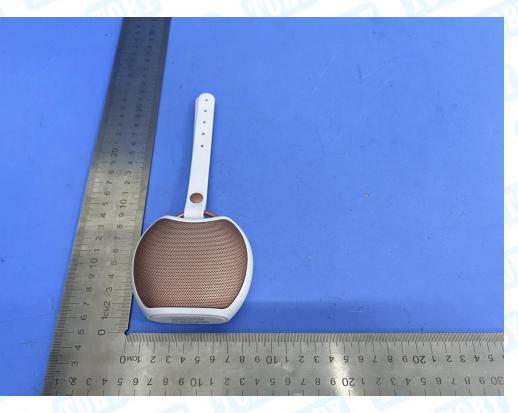
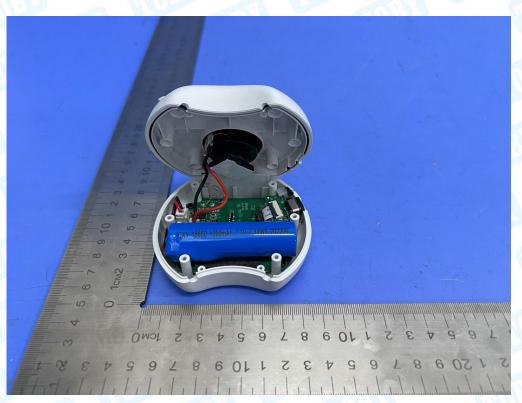


Photo 6 Internal of EUT





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Photo 7 Appearance of PCB

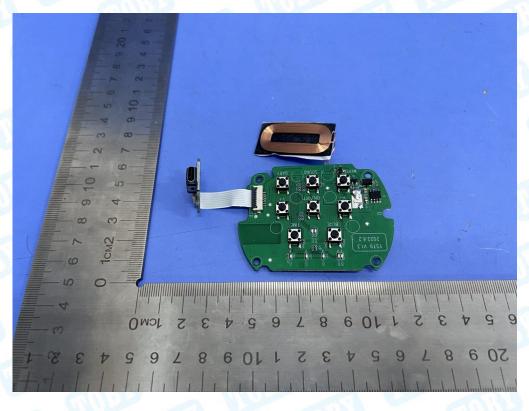
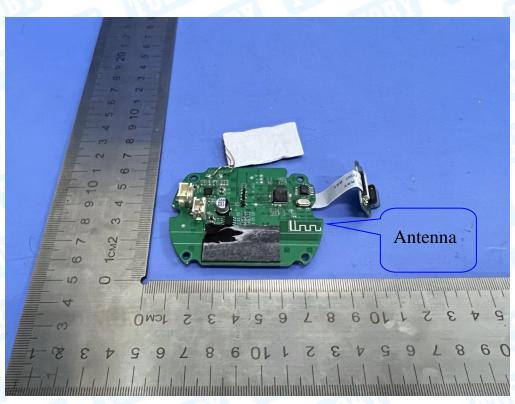


Photo 8 Appearance of PCB





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9. Photographs - Test Setup

Conducted Emission Test Setup



Radiated Emission Test Setup-Below 1GHz







Radiated Emission Test Setup-Below 1GHz

Radiated Emission Test Setup-Above 1GHz



Attachment A--Conducted Emission Test Data

Femperature:	24.4	°C	Re	elative Hum	idity:	44%	
Fest Voltage:	AC	120V/60Hz			6	1002	-
Ferminal:	Line						
Test Mode:	Mod	le 1	5	Um		-	199
Remark:	Only	worse case	is reported		61		
						QP: AV(
30		MMM Munder MM WWW. WWW. WWW. WWW. WWW. WWW. WWW. W	Mphy Min	/****\ ~~~~~	Viving VVVV	and a second and a s	huriyahanyohalum Anuf Yhuyahavi
-20							
0.150		0.5	(MHz)	5			30.000
0.150 No. Mk.	Freq.	Reading Level	^(MH₂) Correct Factor	₅ Measure- ment		Over	30.000
		Reading	Correct	Measure-		Over dB	30.000 Detector
No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit		
No. Mk. 1 0	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	dB	Detector
No. Mk. 1 0 2 0	Freq. MHz .1860	Reading Level dBuV 13.27	Correct Factor dB 11.03	Measure- ment dBuV 24.30	Limit dBuV 64.21	dB -39.91	Detector
No. Mk. 1 0 2 0 3 0	Freq. MHz .1860 .1860	Reading Level dBuV 13.27 -2.65	Correct Factor dB 11.03 11.03	Measure- ment dBuV 24.30 8.38	Limit dBuV 64.21 54.21 58.23	dB -39.91 -45.83	Detector QP AVG
No. Mk. 1 0 2 0 3 0 4 0	Freq. MHz .1860 .1860 .3820	Reading Level dBuV 13.27 -2.65 8.58	Correct Factor dB 11.03 11.03 10.89	Measure- ment dBuV 24.30 8.38 19.47	Limit dBuV 64.21 54.21 58.23 48.23	dB -39.91 -45.83 -38.76	Detector QP AVG QP
No. Mk. 1 0 2 0 3 0 4 0 5 * 0	Freq. MHz .1860 .1860 .3820 .3820	Reading Level dBuV 13.27 -2.65 8.58 -3.05	Correct Factor dB 11.03 11.03 10.89 10.89	Measure- ment dBuV 24.30 8.38 19.47 7.84	Limit dBuV 64.21 54.21 58.23 48.23 56.00	dB -39.91 -45.83 -38.76 -40.39	Detector QP AVG QP AVG
No. Mk. 1 0 2 0 3 0 4 0 5 * 0 6 0	Freq. MHz .1860 .1860 .3820 .3820 .3820 .6140	Reading Level dBuV 13.27 -2.65 8.58 -3.05 6.85	Correct Factor dB 11.03 11.03 10.89 10.89 10.91	Measure- ment dBuV 24.30 8.38 19.47 7.84 17.76	Limit dBuV 64.21 54.21 58.23 48.23 56.00 46.00	dB -39.91 -45.83 -38.76 -40.39 -38.24	Detector QP AVG QP AVG QP
No. Mk. 1 0 2 0 3 0 4 0 5 * 0 6 0 7 1	Freq. MHz .1860 .1860 .3820 .3820 .3820 .6140	Reading Level dBuV 13.27 -2.65 8.58 -3.05 6.85 -3.33	Correct Factor dB 11.03 11.03 10.89 10.89 10.91 10.91	Measure- ment dBuV 24.30 8.38 19.47 7.84 17.76 7.58	Limit dBuV 64.21 54.21 58.23 48.23 56.00 46.00 56.00	dB -39.91 -45.83 -38.76 -40.39 -38.24 -38.42	Detector QP AVG QP AVG QP AVG
No. Mk. 1 0 2 0 3 0 4 0 5 * 0 6 0 7 1 8 1	Freq. MHz .1860 .1860 .3820 .3820 .3820 .6140 .6140 .9140	Reading Level dBuV 13.27 -2.65 8.58 -3.05 6.85 -3.33 2.24	Correct Factor dB 11.03 11.03 10.89 10.89 10.91 10.91 10.51	Measure- ment dBuV 24.30 8.38 19.47 7.84 17.76 7.58 12.75	Limit dBuV 64.21 54.21 58.23 48.23 56.00 46.00 56.00	dB -39.91 -45.83 -38.76 -40.39 -38.24 -38.42 -43.25	Detector QP AVG QP AVG QP AVG QP
No. Mk. 1 0 2 0 3 0 4 0 5 * 0 6 0 7 1 8 1 9 3	Freq. MHz .1860 .1860 .3820 .3820 .6140 .6140 .9140 .9140	Reading Level dBuV 13.27 -2.65 8.58 -3.05 6.85 -3.33 2.24 -4.34	Correct Factor dB 11.03 11.03 10.89 10.89 10.91 10.91 10.51 10.51	Measure- ment dBuV 24.30 8.38 19.47 7.84 17.76 7.58 12.75 6.17	Limit dBuV 64.21 54.21 58.23 48.23 56.00 46.00 56.00 46.00	dB -39.91 -45.83 -38.76 -40.39 -38.24 -38.42 -38.42 -43.25 -39.83	Detector QP AVG QP AVG QP AVG QP AVG
No. Mk. 1 0 2 0 3 0 4 0 5 * 0 6 0 7 1 8 1 9 3 10 3	Freq. MHz .1860 .1860 .3820 .3820 .6140 .6140 .9140 .9140 .5620	Reading Level dBuV 13.27 -2.65 8.58 -3.05 6.85 -3.33 2.24 -4.34 4.14	Correct Factor dB 11.03 11.03 10.89 10.89 10.91 10.91 10.51 10.51 10.51	Measure- ment dBuV 24.30 8.38 19.47 7.84 17.76 7.58 12.75 6.17 14.27	Limit dBuV 64.21 54.21 58.23 48.23 56.00 46.00 56.00 46.00 56.00	dB -39.91 -45.83 -38.76 -40.39 -38.24 -38.42 -38.42 -43.25 -39.83 -41.73	Detector QP AVG QP AVG QP AVG QP AVG

1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)

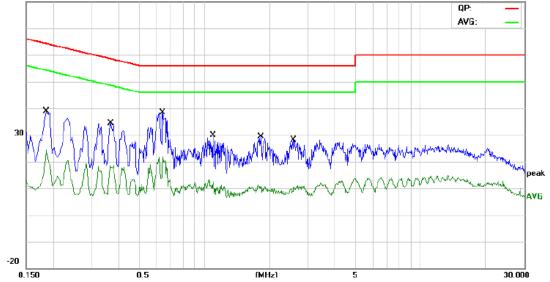
2. Margin (dB) =QuasiPeak/Average (dBuV)-Limit (dBuV)

Cemperature:	24.4°C	Relative Humidity:	44%			
Fest Voltage:	AC 120V/60Hz					
Ferminal:	Neutral					
Test Mode:	Mode 1					
Remark:	Only worse case	is reported.	~			
30 × 1 × ×						
-20 0.150	0.5	(MHz) 5	30.000			

No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	0.1819	14.94	11.04	25.98	64.39	-38.41	QP
2	0.1819	-2.32	11.04	8.72	54.39	-45.67	AVG
3	0.3220	9.74	10.87	20.61	59.65	-39.04	QP
4	0.3220	-3.12	10.87	7.75	49.65	-41.90	AVG
5 *	0.5140	7.87	10.94	18.81	56.00	-37.19	QP
6	0.5140	-3.27	10.94	7.67	46.00	-38.33	AVG
7	1.1740	2.55	10.65	13.20	56.00	-42.80	QP
8	1.1740	-4.35	10.65	6.30	46.00	-39.70	AVG
9	2.6060	1.71	10.31	12.02	56.00	-43.98	QP
10	2.6060	-4.42	10.31	5.89	46.00	-40.11	AVG
11	17.7660	1.09	10.55	11.64	60.00	-48.36	QP
12	17.7660	-4.03	10.55	6.52	50.00	-43.48	AVG

Remark: 1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB) 2. Margin (dB) =QuasiPeak/Average (dBuV)-Limit (dBuV)

Temperature:	24.4°C	Relative Humidity:	44%			
Test Voltage:	AC 120V/60Hz					
Terminal:	Line	Line				
Test Mode:	Mode 2		TUP A			
Remark:	Only worse case is	reported.	C C C C C C C C C C C C C C C C C C C			
80.0 dBuV						

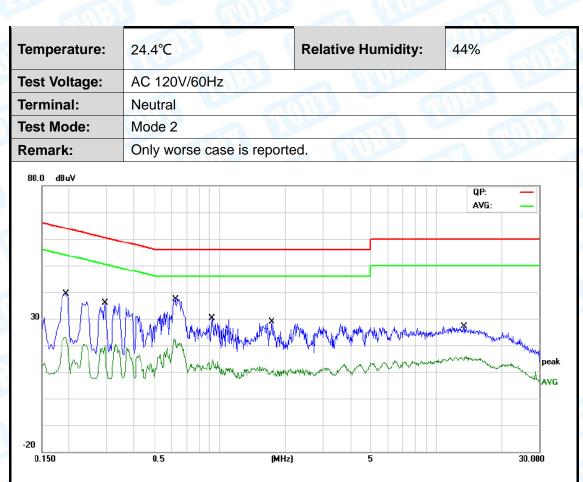


No. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	0.1860	24.66	11.03	35.69	64.21	-28.52	QP
2	0.1860	8.51	11.03	19.54	54.21	-34.67	AVG
3	0.3700	18.16	10.88	29.04	58.50	-29.46	QP
4	0.3700	5.73	10.88	16.61	48.50	-31.89	AVG
5 *	0.6419	22.56	10.90	33.46	56.00	-22.54	QP
6	0.6419	7.87	10.90	18.77	46.00	-27.23	AVG
7	1.0980	11.15	10.66	21.81	56.00	-34.19	QP
8	1.0980	0.73	10.66	11.39	46.00	-34.61	AVG
9	1.8220	9.47	10.53	20.00	56.00	-36.00	QP
10	1.8220	-1.22	10.53	9.31	46.00	-36.69	AVG
11	2.5820	8.93	10.32	19.25	56.00	-36.75	QP
12	2.5820	-1.97	10.32	8.35	46.00	-37.65	AVG
omark							

Remark:

1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)

2. Margin (dB) =QuasiPeak/Average (dBuV)-Limit (dBuV)



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.1940	23.18	11.10	34.28	63.86	-29.58	QP
2		0.1940	5.54	11.10	16.64	53.86	-37.22	AVG
3		0.2940	8.87	10.98	19.85	60.41	-40.56	QP
4		0.2940	-2.78	10.98	8.20	50.41	-42.21	AVG
5	×	0.6220	23.33	10.89	34.22	56.00	-21.78	QP
6		0.6220	9.60	10.89	20.49	46.00	-25.51	AVG
7		0.9220	6.54	10.74	17.28	56.00	-38.72	QP
8		0.9220	-1.99	10.74	8.75	46.00	-37.25	AVG
9		1.7420	11.40	10.58	21.98	56.00	-34.02	QP
10		1.7420	-1.08	10.58	9.50	46.00	-36.50	AVG
11		13.4660	9.67	10.31	19.98	60.00	-40.02	QP
12		13.4660	4.02	10.31	14.33	50.00	-35.67	AVG
4								

Remark:

1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)

2. Margin (dB) =QuasiPeak/Average (dBuV)-Limit (dBuV)

Attachment B--Radiated Emission Test Data

----Below 1G

lem	perature:	23.5℃		Relative Hu	midity:	46%		
est	t Voltage:	AC 120V	/60Hz	No.			- ME	
nt.	Pol.	Horizonta	Horizontal					
est	t Mode:	Mode 1	You and			261		
en	nark:	Only sho	wed test data	of the worst mo	de.		5	
30.0			Anna		8		adiation rgin -6 dB	
20 30	.000 40	50 60 70 80		(MHz) 3	300 400	500 600	700 10	000.

No.	Mk	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		179.3863	39.26	-13.44	25.82	43.50	-17.68	peak
2		240.8304	47.48	-11.82	35.66	46.00	-10.34	peak
3	*	299.3158	44.93	-8.15	36.78	46.00	-9.22	peak
4		361.7139	38.16	-7.49	30.67	46.00	-15.33	peak
5		422.0577	35.96	-5.48	30.48	46.00	-15.52	peak
6		704.2261	33.34	0.57	33.91	46.00	-12.09	peak

Remark:

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB) 2. QuasiPeak (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = QuasiPeak (dBµV/m)-Limit QPK(dBµV/m)

Temperature:	23.5°C		R	elative Hum	idity:	46%			
Test Voltage:	AC 120	AC 120V/60Hz							
Ant. Pol.	10		U.S.	1900					
Test Mode:	Mode	1		an's			NULL		
Remark:	Only sl	howed test	data of the	e worst mode	e.				
80.0 dBu∀/m									
30	1	2	4 3 X			CC 15B 3M Radi Margin	- I I d		
		and the second	/ //* 4						
-20			/ // · · · ·						
	50 60 70	80	(MHz)	300		500 600 70	30 1000.0		
No. Mk. F	R Freq.	Reading Level		300 Measure- ment	400 Limit	500 600 70 Over			
30.000 40 5	R	Reading	Correct	300 Measure-	400	500 600 70	00 1000.0		
30.000 40 5	R Freq. MHz	Reading Level	Correct Factor	300 Measure- ment	400 Limit	500 600 70 Over			
30.000 40 9 No. Mk. F 1 69.	Freq. MHz .6005	Reading Level dBuV 42.80	Correct Factor dB/m	300 Measure- ment dBuV/m	400 Limit dBuV/m	500 600 70 Over dB	Detector		
No. Mk. F 1 69. 2 91.	R Freq. MHz .6005 .4949	Reading Level dBuV 42.80	Correct Factor dB/m -16.32	300 Measure- ment dBuV/m 26.48	400 Limit dBuV/m 40.00	500 600 70 Over dB -13.52	Detector peak		
No. Mk. F 1 69. 2 91. 3 155	Freq. MHz .6005 .4949 5.9101	Reading Level dBuV 42.80 38.59	Correct Factor dB/m -16.32 -15.01	300 Measure- ment dBuV/m 26.48 23.58	400 Limit dBuV/m 40.00 43.50	500 600 70 Over dB -13.52 -19.92	Detector peak peak		
30.000 40 5 No. Mk. F 1 69. 2 91. 3 155 4 179	Freq. MHz .6005 .4949 5.9101 0.3863	Reading Level dBuV 42.80 38.59 42.49	Correct Factor dB/m -16.32 -15.01 -14.01	300 Measure- ment dBuV/m 26.48 23.58 28.48	400 Limit dBuV/m 40.00 43.50 43.50	500 600 70 Over dB -13.52 -19.92 -15.02	Detector peak peak peak		

Remark:

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB) 2. QuasiPeak (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = QuasiPeak (dBµV/m)-Limit QPK(dBµV/m)

emperature:	23.5°C	Relati	ve Humidity:	46%		
est Voltage:	AC 120V/60H	Hz	GULL	1		399
nt. Pol.	Horizontal			2012	2	
est Mode:	Mode 2				-	
Remark:	Only showed	I test data of the wo	rst mode.			
80.0 dBuV/m						
			4 5		l Radiation Aargin -6 c	- L e
30 1 X	um marine	2 3 WMM	Annan A	mbar provide a		
-20	0 60 70 80	(MHz)	300 40	0 500 60	0 700	1000

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		31.0706	33.66	-9.28	24.38	40.00	-15.62	peak
2		141.3298	40.92	-14.63	26.29	43.50	-17.21	peak
3		170.7926	39.93	-13.57	26.36	43.50	-17.14	peak
4		291.0360	37.45	-8.92	28.53	46.00	-17.47	peak
5		401.8385	33.48	-4.71	28.77	46.00	-17.23	peak
6	*	932.2715	34.03	3.59	37.62	46.00	-8.38	peak

Remark: 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB) 2. QuasiPeak (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)

3. Margin (dB) = QuasiPeak (dB μ V/m)-Limit QPK(dB μ V/m)



		1 Sector	111			2 4
Temperature:	23.5℃		Relative Hu	midity:	46%	
Test Voltage:	AC 120V	/60Hz	AV		(B)	
Ant. Pol.	Vertical		100			1
Test Mode:	Mode 2		(III)	39		UP
Remark:	Only sho	wed test data c	of the worst mod	de.		
80.0 dBuV/m						
				F	CC 15B 3M Radi	ation
					Margin	-6 dB
		1			e Xrr	non
30 X	2 X	M Aug	4 5 X X	menter mo	wither	
may	When	minimum when	munut			
-20 30.000 40 50	60 70 80	(MI	1z) 30	DO 400	500 600 70	0 1000.00
No. Mk. Fr		ading Corre		Limit	Over	
		evel Facto				
м		BuV dB/m	dBuV/m	dBuV/m	dB	Detector
1 * 50.7	637 47	7.17 -16.76	30.41	40.00	-9.59	peak
2 69.6	005 41	1.94 -16.32	2 25.62	40.00	-14.38	peak
3 123.0	6985 42	2.67 -15.54	4 27.13	43.50	-16.37	peak
4 169.	5990 39	9.33 -13.6	1 25.72	43.50	-17.78	peak
5 305.0	6800 34	4.41 -8.10	26.31	46.00	-19.69	peak
						-

Remark:

6

570.6100

Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
 QuasiPeak (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)

35.09

-3.23

31.86

3. Margin (dB) = QuasiPeak (dBµV/m)-Limit QPK(dBµV/m)

-14.14

peak

46.00



---- Above 1G

Ten	perature:	23.5℃	Relative Humidity:46%	
Tes	t Voltage:	AC 120V/60Hz		2
Ant	. Pol.	Horizontal		
Tes	t Mode:	Mode 3		
Rer	nark:	Only showed test	data of the worst mode.	
90.	0 dBu¥/m			
			FCC PART 158 3M Radiation (PEAK)	
	1 X		FCC PART 15B 3M Radiation (AVG)	
	2			
40	×			
10				
-10	00.000 3550.00	6100.00 8650.00 1120	0.00 13750.00 16300.00 18850.00 21400.00 2650	10.0

No	. Mk	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2103.147	14.14	41.33	55.47	74.00	-18.53	peak
2	*	2103.288	2.20	41.33	43.53	54.00	-10.47	AVG

- Remark: 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB) 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dBµV/m)-Limit PK/AVG(dBµV/m)



Temperature:	23.5℃	Relative Humidity:46%						
Test Voltage:	AC 120V/60Hz	AC 120V/60Hz						
Ant. Pol.	Vertical	GUD A						
Test Mode:	Mode 3							
Remark:	Only showed test	data of the worst mode.						
90.0 dBuV/m								
		FCC PART 15B 3M Radiation (PEAK)						
2 X		FCC PART 158 3M Radiation (AVG)						
1								
40 ×								
-10								

No	. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	1877.147	5.69	37.52	43.21	54.00	-10.79	AVG
2		1877.225	17.94	37.53	55.47	74.00	-18.53	peak

- Remark: 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB) 2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV/m)
- 3. Margin (dB) = Peak/AVG (dBµV/m)-Limit PK/AVG(dBµV/m)

END OF REPORT-