

ETSI EN300 328 RADIO TEST REPORT

For

Dongguan Jingheng Electron Co., Ltd.

Active Loudspeaker System

Model Number: MegaSys 1

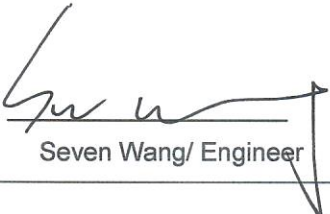
Additional Model: AXV15.12

Applicant:	Dongguan Jingheng Electron Co., Ltd.
Address:	Room 101, Building 1, No. 15, Shenle 1st Road, Hengli Town,
	Dongguan City, 523465 Guangdong, P. R. China
Prepared By:	EST Technology Co., Ltd.
	Chilingxiang, Qishantou, Santun, Houjie, Dongguan, Guangdong, China
Tel: 86-769-83081888-808	

Report Number:	ESTE-R2404173
Date of Test:	Apr. 10~Apr. 19, 2024
Date of Report:	Apr. 24, 2024

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Applicant: Address:	Dongguan Jingheng Electron Co., Ltd. Room 101, Building 1, No. 15, Shenle 1st Road, Hengli Town, Dongguan City, 523465 Guangdong, P. R. China		
Manufacturer: Address:	Dongguan Jingheng Electron Co., Ltd. Room 101, Building 1, No. 15, Shenle 1st Road, Hengli Town, Dongguan City, 523465 Guangdong, P. R. China		
Factory: Address:	Dongguan Jinheng Electron Co., Ltd. No. 15, Shenle 1st Road, Hengli Town, Dongguan City, 523465 Guangdong, P.R. China		
E.U.T:	Active Loudspeaker System		
Model Number:	MegaSys 1		
Additional Model:	AXV15.12 Note: They are identical except model name.		
Power Supply:	AC 110-240V, 50/60Hz		
Trade Name:	SHOW, TOPP PRO		
Date of Receipt:	Apr. 10, 2024	Date of Test:	Apr. 10~Apr. 19, 2024
Test Specification:	ETSI EN 300 328 V2.2.2: 2019-07		
Test Result:	The device described above is tested by EST Technology Co., Ltd.. The measurement results were contained in this test report and EST Technology Co.,Ltd. was assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliance with the ETSI EN 300 328 requirements. This report applies to above tested sample only and shall not be reproduced in part without written approval of EST Technology Co., Ltd. Date: Apr. 24, 2024		
Prepared by: Zephyr Zhu Zephyr Zhu / Assistant	Reviewed by:  Seven Wang/ Engineer	Approved by:  Iceman Hu / Manager	
Other Aspects: N/A			
Abbreviations: OK/P=passed fail/F=failed n.a/N=not applicable E.U.T=equipment under tested			
This test report is based on a single evaluation of one sample of above mentioned products ,It is not permitted to be duplicated in extracts without written approval of EST Technology Co., Ltd.			

1.GENERAL INFORMATION

1.1.Description of Device (EUT)

Product Name	:	Active Loudspeaker System
Model Number	:	MegaSys 1
Module Model Number	:	HJ-7188
Software Version	:	N/A
Hardware Version	:	N/A
Operation frequency	:	2402MHz~2480MHz
Number of channel	:	79
Modulation&Transmit Data Rate	:	BT BDR(1Mbps): GFSK BT EDR(2Mbps): $\pi/4$ -DQPSK BT EDR(3Mbps): 8DPSK
Operating Temperature Range	:	0°C~+45°C
Sample Type	:	Prototype production

1.2.Antenna Information

Ant No.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	-	-	PCB	-	-0.58
Note: 1.The antenna gain is declared by the customer and the laboratory is not responsible for the accuracy of the antenna gain. 2.The test results of this report only apply to the sample as received.					

2.SUMMARY OF MEASUREMENTS AND RESULTS

Harmonized Standard EN300 328				
The following essential requirements and test specifications are relevant to the presumption of conformity under Article 3.2 of the Radio Equipment Directive 2014/53/EU				
No	Test Parameter	Clause No	Condition	Results
1	RF Output Power	4.3.1.2 or 4.3.2.2	Apply all equipment	N/A
2	Power Spectral Density	4.3.2.3	Only for modulations other than FHSS equipment	N/A
3	Duty Cycle ,Tx-Sequence, Tx-gap	4.3.1.3 or 4.3.2.4	Only for non-adaptive equipment	N/A
4	Accumulated Transmit Time, Frequency Occupation and Hopping Sequence	4.3.1.4	Only for FHSS equipment	N/A
5	Hopping Frequency Separation	4.3.1.5	Only for FHSS equipment	N/A
6	Medium Utilization	4.3.1.6 or 4.3.2.5	Only for non-adaptive equipment	N/A
7	Adaptivity	4.3.1.7 or 4.3.2.6	Only for adaptive equipment	N/A
8	Occupied Channel Bandwidth	4.3.1.8 or 4.3.2.7	Apply all equipment	N/A
9	Transmitter unwanted emissions in the OOB domain	4.3.1.9 or 4.3.2.8	Apply all equipment	N/A
10	Transmitter unwanted emissions in the spurious domain	4.3.1.10 or 4.3.2.9	Apply all equipment	PASS
11	Receiver spurious emissions	4.3.1.11 or 4.3.2.10	Apply all equipment	PASS
12	Receiver Blocking	4.3.1.12 or 4.3.2.11	Apply all equipment	N/A
13	Geo-location capability	4.3.1.13 or 4.3.2.12	Only for equipment with geo-location capability	N/A
Note: 1.N/A is an abbreviation for Not Applicable and means this test item is not applicable for this device according to the technology characteristic of device. 2. The wireless module HJ-7188 included in the device passed the RED certification, when applied to the host, Re-test RSE of BT function, all other test data refer to module test report CN23FBBU 001.				

2.1. Test Facilities

EMC Lab

: Accredited by CNAS, CHINA
Registration No.: L5288
This Accreditation is valid until: November 12, 2029

Recognized by FCC, USA
Designation Number: CN1215
This Recognition is valid until: January 31, 2026

Accredited by A2LA, USA
Registration No.: 4366.01
This Accreditation is valid until: January 31, 2026

Recognized by Industry Canada
CAB identifier No.: CN0035
This Recognition is valid until: January 31, 2026

Recognized by VCCI, Japan
Registration No.: C-14103; T-20073; R-13663;
R-20103; G-20097
Date of registration: Apr. 20, 2020
This Recognition is valid until: Apr. 19, 2026

Recognized by TUV Rheinland, Germany
Registration No.: UA 50413872 0001
Date of registration: July 31, 2018

Recognized by Intertek
Registration No.: 2011-RTL-L2-64
Date of registration: November 08, 2018

Name of Firm : EST Technology Co., Ltd.

Site Location : Chilingxiang, Qishantou, Santun, Houjie, Dongguan,
Guangdong, China

2.2.Measurement Uncertainty

Test Item	Uncertainty
Uncertainty for Conduction emission test	±3.48dB
Uncertainty for spurious emissions test (30MHz-1GHz)	±4.60 dB(Polarize: H)
	±4.68 dB(Polarize: V)
Uncertainty for spurious emissions test (1GHz to 18GHz)	±4.96dB
Uncertainty for radio frequency	7×10^{-8}
Uncertainty for conducted RF Power	1.08dB
Uncertainty for Power density test	0.26dB

Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

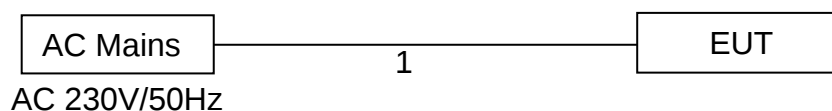
2.3.Assistant Equipment Used For Test

Item	Equipment	Brand	Model Name/Type No.	FCC ID	Series No.
-	-	-	-	-	-

Item	Shielded Type	Ferrite Core	Length	Note
1	NO	NO	2.0m	AC Cable

2.4.Block Diagram of Test Setup

For radiated emissions test: EUT was placed on a turn table, which is 1.5 meter high above ground. EUT was beset into BT test mode by software before test.



(EUT: Active Loudspeaker System)

2.5. Test Mode

Combining all the rates, modulations, and packet types, the Pre-scans had been carried out. The worst case test mode was selected for the final test as listed below.

Test Item	Modulation Type	Operating Mode	Packet Type	Test Channel
Transmitter Unwanted Emissions In The Spurious Domain	GFSK&8-DPSK	Non Hopping	DH5/3DH5	Low/ High
Receiver Spurious Emissions	GFSK&8-DPSK	Receive	-	Low/ High

Note: In radiated measurement, the EUT had been pre-scan on the positioned of each 3 axis(X,Y,Z), the worst case was found when positioned on **X-plane**.

2.6.Channel List

Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
0	2402	1	2403	2	2404	3	2405
4	2406	5	2407	6	2408	7	2409
8	2410	9	2411	10	2412	11	2413
12	2414	13	2415	14	2416	15	2417
16	2418	17	2419	18	2420	19	2421
20	2422	21	2423	22	2424	23	2425
24	2426	25	2427	26	2428	27	2429
28	2430	29	2431	30	2432	31	2433
32	2434	33	2435	34	2436	35	2437
36	2438	37	2439	38	2440	39	2441
40	2442	41	2443	42	2444	43	2445
44	2446	45	2447	46	2448	47	2449
48	2450	49	2451	50	2452	51	2453
52	2454	53	2455	54	2456	55	2457
56	2458	57	2459	58	2460	59	2461
60	2462	61	2463	62	2464	63	2465
64	2466	65	2467	66	2468	67	2469
68	2470	69	2471	70	2472	71	2473
72	2474	73	2475	74	2476	75	2477
76	2478	77	2479	78	2480	-	-

2.7. Test Equipment List

For Radiated Emissions Test (30MHz-1000MHz)						
Equipment	Manufacturer	Model No.	Serial No.	Calibration Body	Last Cal.	Next Cal.
EMI Test Receiver	Rohde & Schwarz	ESR7	EST-E047	LISAI	June 12,23	1 Year
Bilog Antenna	Teseq	CBL 6111D	EST-E034	LISAI	June 12,23	1 Year
Test Software	Audix	e3-6.111221a	N/A	N/A	N/A	N/A
30-1000MHz Cable	N/A	EST-002	N/A	N/A	N/A	N/A

For Radiated Emission Test(Above 1000MHz)						
Equipment	Manufacturer	Model No.	Serial No.	Calibration Body	Last Cal.	Next Cal.
Horn Antenna	SCHWARZBECK	BBHA9120D	EST-E144	LISAI	June 12,23	1 Year
Low Noise Amplifier	RF	TRLA-010180 G45N	EST-E142	LISAI	June 12,23	1 Year
Spectrum Analyzer	Rohde & Schwarz	FSV40	EST-E069	LISAI	June 12,23	1 Year
Test Software	Audix	e3-6.111221a	N/A	N/A	N/A	N/A
Above 1GHz Cable	N/A	EST-003	N/A	N/A	N/A	N/A

3. TRANSMITTER UNWANTED EMISSIONS IN THE SPURIOUS DOMAIN

3.1. Applicability

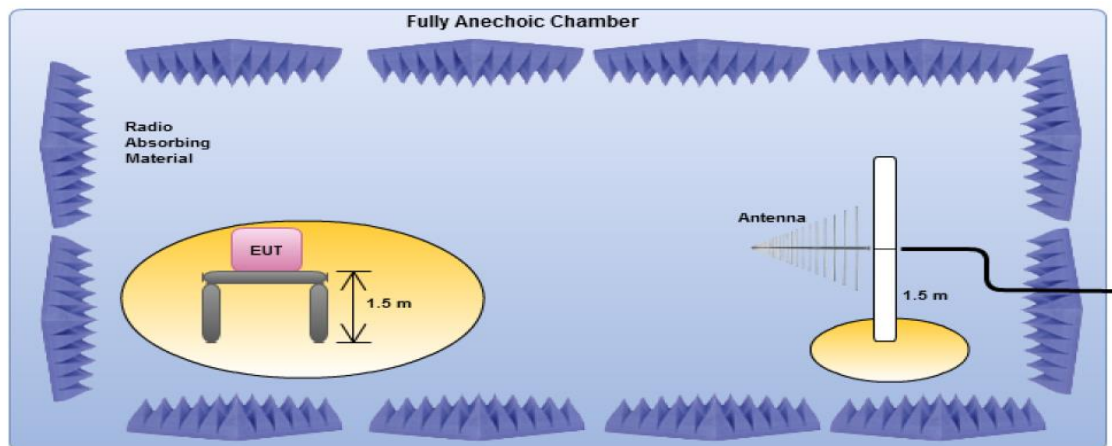
This requirement applies to all types of FHSS equipment.

3.2. Limit

Frequency Range	Maximum Power	Bandwidth
30MHz to 47MHz	-36dBm	100kHz
47MHz to 74MHz	-54dBm	100kHz
74MHz to 87,5MHz	-36dBm	100kHz
87,5MHz to 118MHz	-54dBm	100kHz
118MHz to 174MHz	-36dBm	100kHz
174MHz to 230MHz	-54dBm	100kHz
230MHz to 470MHz	-36dBm	100kHz
470MHz to 694MHz	-54dBm	100kHz
694MHz to 1GHz	-36dBm	100kHz
1GHz to 12,75GHz	-30dBm	1MHz

Note: These limits are e.r.p. for emissions up to 1 GHz and as e.i.r.p. for emissions above 1 GHz.

3.3. Test Setup



3.4. Test Procedure

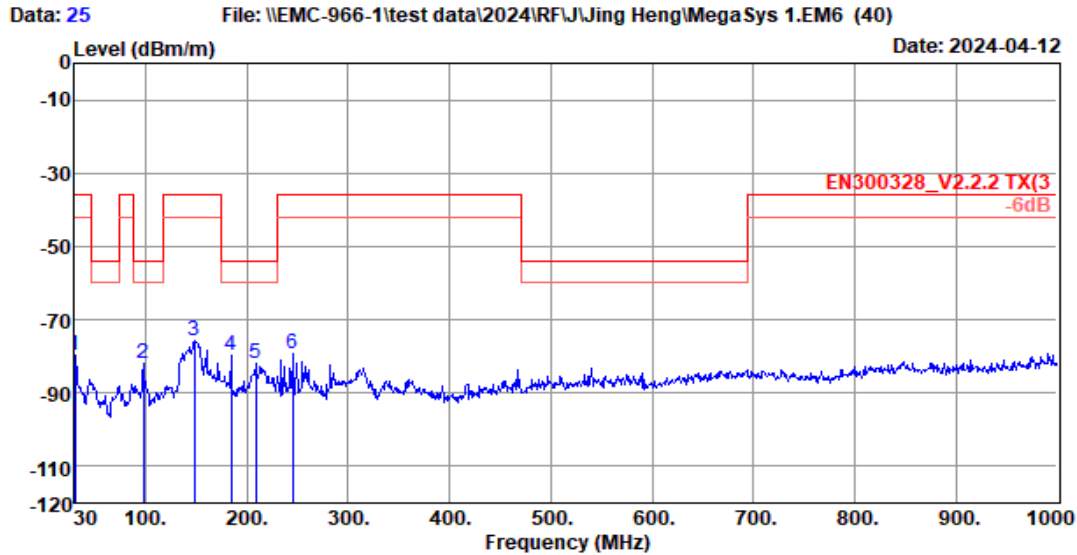
- EUT was placed on a turn table, which is 1.5 meter high above ground.
- Test Antenna is set 3 meters away from the EUT, which is connect to a spectrum analyzer.
- Set the EUT transmit continuously with maximum output power in non hopping mode.
- The measurement procedure refer to clause 5.4.9.2.2 of ETSI EN300 328 V2.2.2.
- Repeat above procedures until low channel and high channel were measured.
- Repeat above procedures until all modulation types were measured.
- Record the results in the test report.

3.5. Test Result

30MHz to 1GHz

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Site no. : 1# 966 Chamber Data no. : 25
Dis. / Ant. : 3m 37062-25MHZ Ant. pol. : VERTICAL
Limit : EN300328_V2.2.2 TX(3)
Env. / Ins. : Temp:22.8°C;Humi:50.6%;Press:101.55kPa
Engineer : ZQL
EUT : Active Loudspeaker System
Power : AC 230V/50Hz
M/N : MegaSys 1
Test Mode : TX Mode

	Freq.	Ant.	Cable		Site	Emission			
	(MHz)	Factor	Loss	Reading	Loss	Level	Limits	Margin	Type
		(dB/m)	(dB)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	
1	30.00	18.60	0.16	-102.28	3.75	-79.77	-36.00	43.77	eirp
2	97.90	9.92	0.45	-92.70	0.46	-81.87	-54.00	27.87	eirp
3	148.34	11.52	0.67	-91.25	3.32	-75.74	-36.00	39.74	eirp
4	184.23	9.16	0.82	-92.12	2.57	-79.57	-54.00	25.57	eirp
5	208.48	8.86	0.92	-91.39	-0.45	-82.06	-54.00	28.06	eirp
6	245.34	11.80	1.08	-92.01	0.06	-79.07	-36.00	43.07	eirp

Remarks: 1. Emission Level = Reading+Antenna Factor+Cable Loss+Site Loss
2. Margin = Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

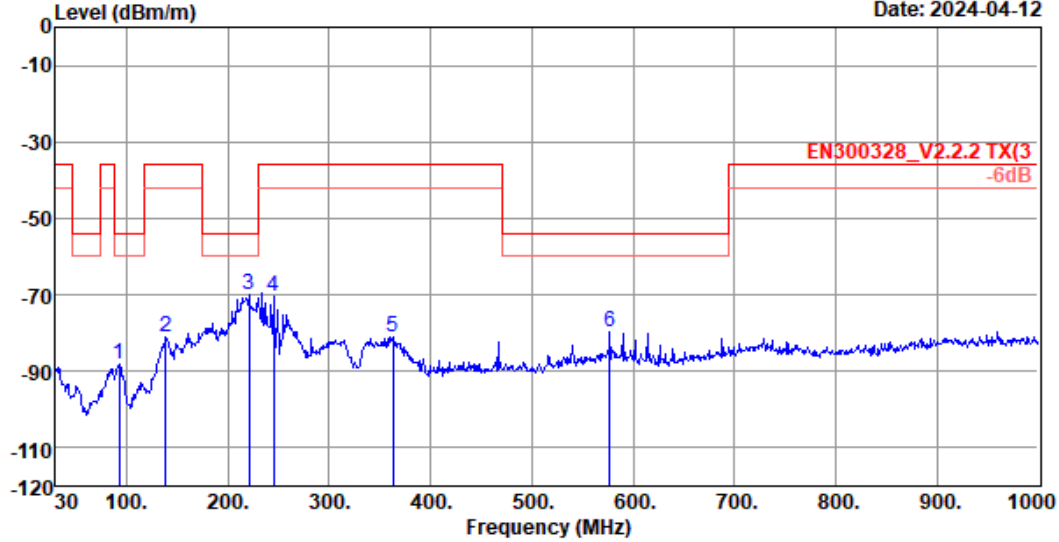
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Data: 26

File: \\EMC-966-1\test data\2024\RF\Jing Heng\MegaSys 1.EM6 (40)

Date: 2024-04-12



Site no. : 1# 966 Chamber Data no. : 26
Dis. / Ant. : 3m 37062-25MHZ Ant. pol. : HORIZONTAL
Limit : EN300328_V2.2.2 TX(3)
Env. / Ins. : Temp:22.8°C;Humi:50.6%;Press:101.55kPa
Engineer : ZQL
EUT : Active Loudspeaker System
Power : AC 230V/50Hz
M/N : MegaSys 1
Test Mode : TX Mode

	Ant.	Cable	Site	Emission					
Freq.	Factor	Loss	Reading	Loss	Level	Limits	Margin	Type	
(MHz)	(dB/m)	(dB)	(dBm)	(dB)	(dBm)	(dBm)	(dB)		
1	93.05	9.72	0.43	-96.74	-1.35	-87.94	-54.00	33.94	eirp
2	138.64	12.22	0.63	-91.78	-2.32	-81.25	-36.00	45.25	eirp
3	221.09	9.94	0.98	-83.88	3.12	-69.84	-54.00	15.84	eirp
4	245.34	11.80	1.08	-87.26	3.82	-70.56	-36.00	34.56	eirp
5	362.71	15.46	1.58	-97.23	-0.95	-81.14	-36.00	45.14	eirp
6	577.08	19.77	2.50	-101.19	-0.57	-79.49	-54.00	25.49	eirp

Remarks: 1. Emission Level = Reading+Antenna Factor+Cable Loss+Site Loss
2. Margin = Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

Above 1GHz

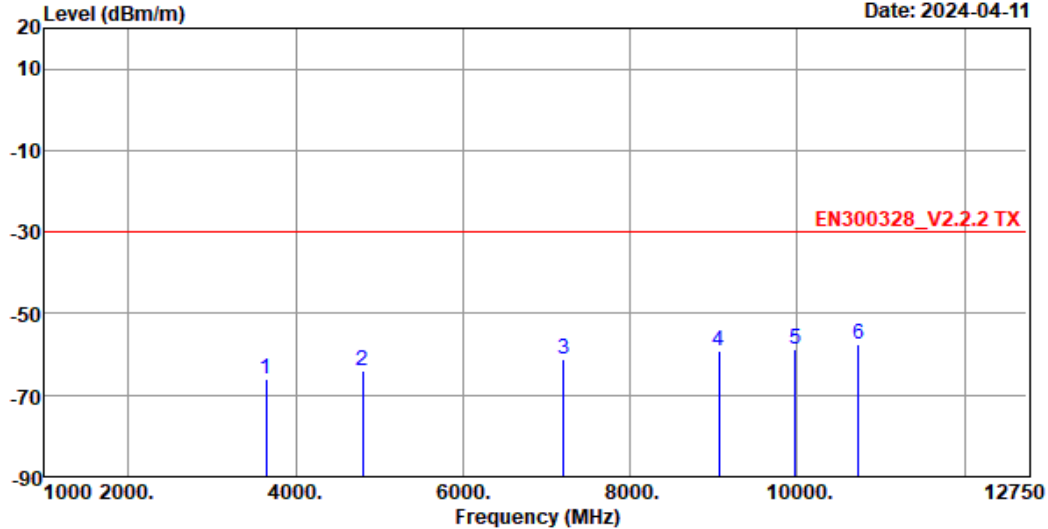
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Data: 13

File: \\EMC-966-1\test data\2024\RF\Jing Heng\MegaSys 1.EM6 (40)

Date: 2024-04-11



Site no. : 1# 966 Chamber Data no. : 13
Dis. / Ant. : 3m BBHA9120D-2667 Ant. pol. : HORIZONTAL
Limit : EN300328_V2.2.2 TX
Env. / Ins. : Temp:22.8°C;Humi:57%;Press:101.55kPa
Engineer : ZQL
EUT : Active Loudspeaker System
Power : AC 230V/50Hz
M/N : MegaSys 1
Test Mode : GFSK TX 2402MHz

	Freq.	Ant.	Cable	Amp	Site	Emission				
	(MHz)	Factor	Loss	Factor	Reading	Loss	Level	Limits	Margin	Type
		(dB/m)	(dB)	(dB)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	
1	3643.75	30.17	4.19	44.99	-58.52	3.12	-66.03	-30.00	36.03	eirp
2	4807.00	32.39	5.20	44.49	-60.33	3.12	-64.11	-30.00	34.11	eirp
3	7204.00	36.16	6.67	44.08	-58.69	-1.27	-61.21	-30.00	31.21	eirp
4	9060.50	38.01	7.78	43.42	-62.56	0.85	-59.34	-30.00	29.34	eirp
5	9977.00	38.20	7.77	43.79	-63.68	2.96	-58.54	-30.00	28.54	eirp
6	10729.00	38.71	8.13	43.22	-64.70	3.36	-57.72	-30.00	27.72	eirp

Remarks: 1. Emission Level= Reading+Antenna Factor+Cable Loss-Amp Factor+Site Loss
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

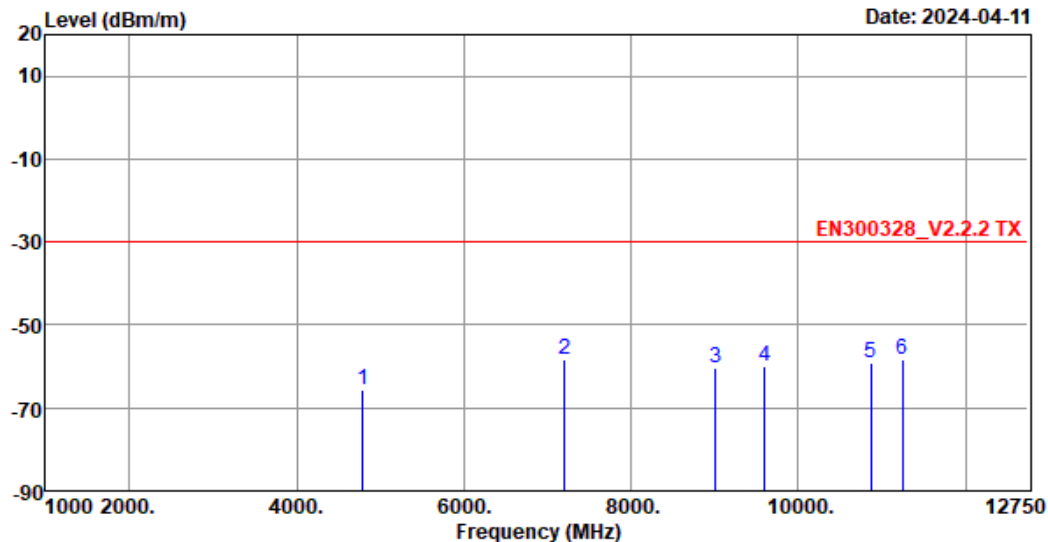
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Data: 14

File: \\EMC-966-1\test data\2024\RF\Jing Heng\MegaSys 1.EM6 (40)

Date: 2024-04-11



Site no. : 1# 966 Chamber Data no. : 14
Dis. / Ant. : 3m BBHA9120D-2667 Ant. pol. : VERTICAL
Limit : EN300328_V2.2.2 TX
Env. / Ins. : Temp:22.8°C;Humi:57%;Press:101.55kPa
Engineer : ZQL
EUT : Active Loudspeaker System
Power : AC 230V/50Hz
M/N : MegaSys 1
Test Mode : GFSK TX 2402MHz

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBm)	Site Loss (dB)	Emission Level (dBm)	Limits (dBm)	Margin (dB)	Type
1	4795.25	32.37	5.18	44.50	-57.96	-0.82	-65.73	-30.00	35.73	eirp
2	7204.00	36.16	6.67	44.08	-58.94	1.78	-58.41	-30.00	28.41	eirp
3	9013.50	38.00	7.78	43.40	-63.40	0.80	-60.22	-30.00	30.22	eirp
4	9601.00	38.12	7.77	43.64	-62.15	0.05	-59.85	-30.00	29.85	eirp
5	10870.00	38.81	8.20	43.09	-63.40	0.49	-58.99	-30.00	28.99	eirp
6	11246.00	38.88	8.40	42.80	-64.03	1.18	-58.37	-30.00	28.37	eirp

Remarks: 1. Emission Level= Reading+Antenna Factor+Cable Loss-Amp Factor+Site Loss
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

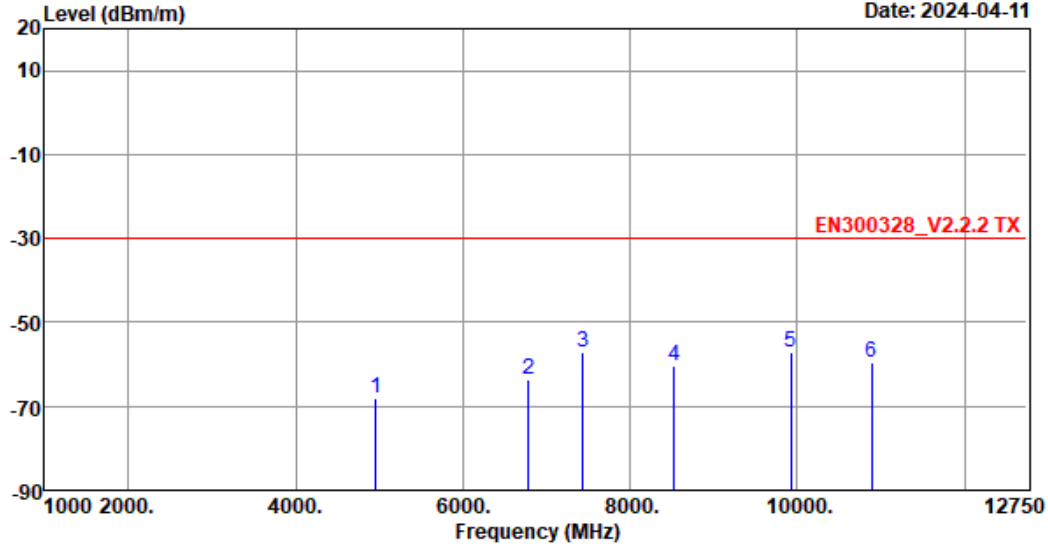
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Data: 15

File: \\EMC-966-1\test data\2024\RF\Jing Heng\MegaSys 1.EM6 (40)

Date: 2024-04-11



Site no. : 1# 966 Chamber Data no. : 15
Dis. / Ant. : 3m BBHA9120D-2667 Ant. pol. : VERTICAL
Limit : EN300328_V2.2.2 TX
Env. / Ins. : Temp:22.8°C;Humi:57%;Press:101.55kPa
Engineer : ZQL
EUT : Active Loudspeaker System
Power : AC 230V/50Hz
M/N : MegaSys 1
Test Mode : GFSK TX 2480MHz

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBm)	Site Loss (dB)	Emission Level (dBm)	Limits (dBm)	Margin (dB)	Type
1	4959.75	32.72	5.37	44.33	-60.30	-1.60	-68.14	-30.00	38.14	eirp
2	6781.00	35.54	6.50	44.10	-62.76	1.26	-63.56	-30.00	33.56	eirp
3	7439.00	36.35	6.74	44.06	-57.67	1.61	-57.03	-30.00	27.03	eirp
4	8531.75	37.44	7.37	43.68	-62.46	1.01	-60.32	-30.00	30.32	eirp
5	9918.25	38.18	7.77	43.77	-59.12	-0.36	-57.30	-30.00	27.30	eirp
6	10893.50	38.83	8.21	43.08	-63.86	0.51	-59.39	-30.00	29.39	eirp

Remarks: 1. Emission Level= Reading+Antenna Factor+Cable Loss-Amp Factor+Site Loss
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

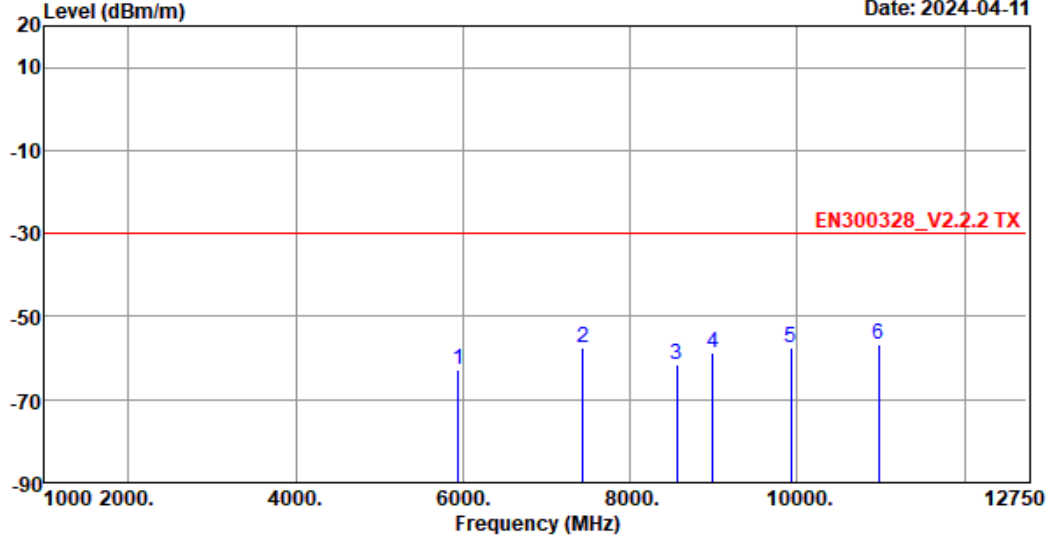
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Data: 16

File: \\EMC-966-1\test data\2024\RF\Jing Heng\MegaSys 1.EM6 (40)

Date: 2024-04-11



Site no. : 1# 966 Chamber Data no. : 16
Dis. / Ant. : 3m BBHA9120D-2667 Ant. pol. : HORIZONTAL
Limit : EN300328_V2.2.2 TX
Env. / Ins. : Temp:22.8°C;Humi:57%;Press:101.55kPa
Engineer : ZQL
EUT : Active Loudspeaker System
Power : AC 230V/50Hz
M/N : MegaSys 1
Test Mode : GFSK TX 2480MHz

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBm)	Site Loss (dB)	Emission Level (dBm)	Limits (dBm)	Margin (dB)	Type
1	5946.75	33.84	6.12	44.11	-61.37	2.52	-63.00	-30.00	33.00	eirp
2	7439.00	36.35	6.74	44.06	-55.35	-1.41	-57.73	-30.00	27.73	eirp
3	8555.25	37.47	7.39	43.67	-62.20	-0.38	-61.39	-30.00	31.39	eirp
4	8990.00	37.99	7.77	43.41	-61.90	0.69	-58.86	-30.00	28.86	eirp
5	9918.25	38.18	7.77	43.77	-62.40	2.82	-57.40	-30.00	27.40	eirp
6	10975.75	38.88	8.25	43.01	-64.12	3.48	-56.52	-30.00	26.52	eirp

Remarks: 1. Emission Level= Reading+Antenna Factor+Cable Loss-Amp Factor+Site Loss
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

4.RECEIVER SPURIOUS EMISSIONS

4.1.Applicability

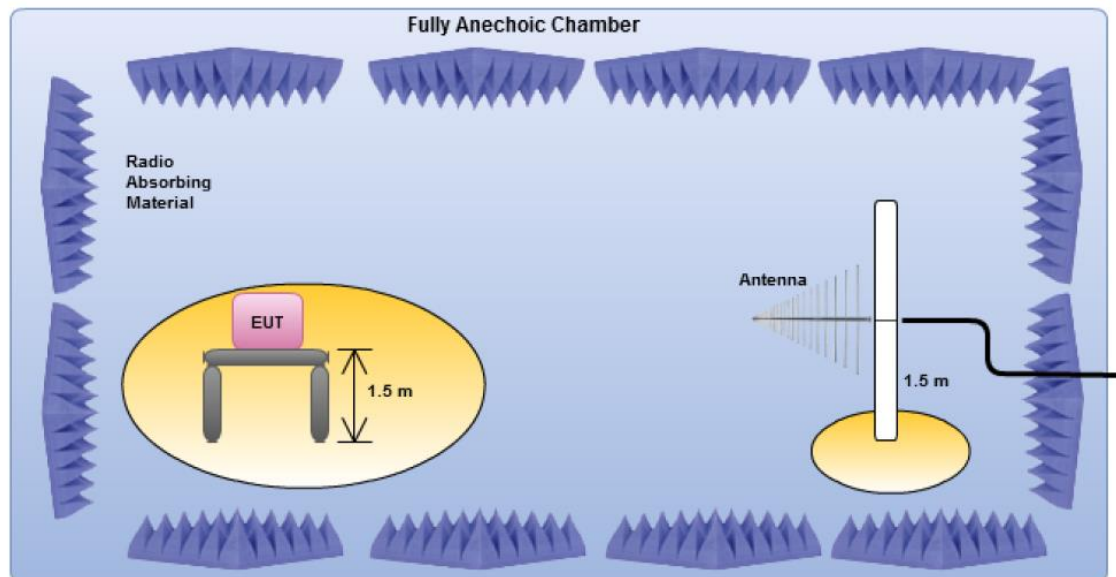
This requirement applies to all types of FHSS equipment.

4.2.Limit

Frequency Range	Maximum Power	Bandwidth
30MHz to 1GHz	-57dBm	100kHz
1GHz to 12,75GHz	-47dBm	1MHz

Note: These limits are e.r.p. for emissions up to 1 GHz and as e.i.r.p. for emissions above 1 GHz.

4.3.Test Setup



4.4.Test Procedure

- EUT was placed on a turn table, which is 1.5 meter high above ground.
- Test Antenna is set 3 meters away from the EUT, which is connect to a spectrum analyzer.
- Set the EUT to receive mode.
- The measurement procedure refer to clause 5.4.10.2.2 of ETSI EN300 328 V2.2.2.
- Repeat above procedures until low channel and high channel were measured.
- Record the results in the test report.

4.5. Test Result

30MHz to 1GHz

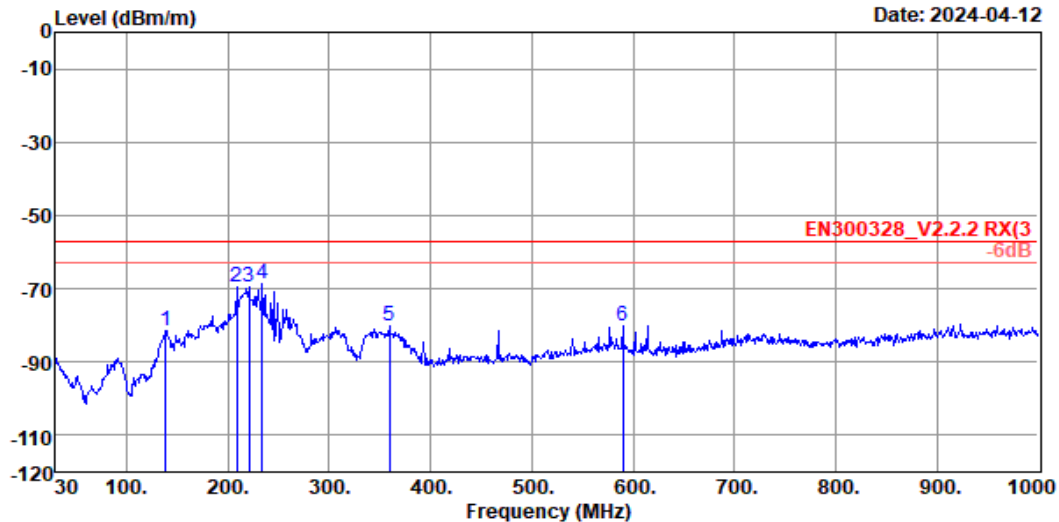
EST Technology

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Houjie, Dongguan, Guangdong, China
Tel: +86-769-83081888
Fax: +86-769-83081878

Data: 27

File: \\EMC-966-1\test data\2024\RF\Jing Heng\MegaSys 1.EM6 (40)

Date: 2024-04-12



Site no. : 1# 966 Chamber Data no. : 27
Dis. / Ant. : 3m 37062-25MHZ Ant. pol. : HORIZONTAL
Limit : EN300328_V2.2.2 RX(3)
Env. / Ins. : Temp:22.8°C;Humi:50.6%;Press:101.55kPa
Engineer : ZQL
EUT : Active Loudspeaker System
Power : AC 230V/50Hz
M/N : MegaSys 1
Test Mode : RX Mode

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBm)	Site Loss (dB)	Emission Level (dBm)	Limits (dBm)	Margin (dB)	Type
1	138.64	12.22	0.63	-92.03	-2.32	-81.50	-57.00	24.50	eirp
2	208.48	8.86	0.92	-82.16	2.75	-69.63	-57.00	12.63	eirp
3	221.09	9.94	0.98	-83.42	3.12	-69.38	-57.00	12.38	eirp
4	233.70	11.02	1.03	-84.69	3.80	-68.84	-57.00	11.84	eirp
5	359.80	15.48	1.57	-96.43	-0.97	-80.35	-57.00	23.35	eirp
6	589.69	20.10	2.55	-101.72	-1.16	-80.23	-57.00	23.23	eirp

Remarks: 1. Emission Level = Reading+Antenna Factor+Cable Loss+Site Loss
2. Margin = Limit - Emission Level.
3. The emission levels that are 20dB below the official
limit are not reported.

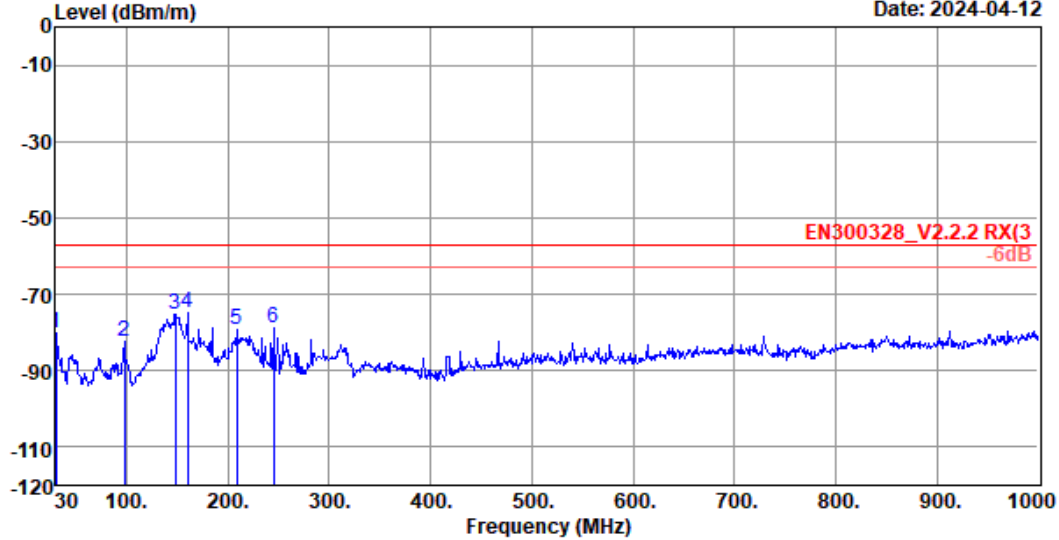
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Fax: +86-769-83081878

Data: 28

File: \\EMC-966-1\test data\2024\RF\Jing Heng\MegaSys 1.EM6 (40)

Date: 2024-04-12



Site no. : 1# 966 Chamber Data no. : 28
Dis. / Ant. : 3m 37062-25MHZ Ant. pol. : VERTICAL
Limit : EN300328_V2.2.2 RX(3)
Env. / Ins. : Temp:22.8°C;Humi:50.6%;Press:101.55kPa
Engineer : ZQL
EUT : Active Loudspeaker System
Power : AC 230V/50Hz
M/N : MegaSys 1
Test Mode : RX Mode

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBm)	Site Loss (dB)	Emission Level (dBm)	Limits (dBm)	Margin (dB)	Type
1	30.00	18.60	0.16	-102.60	3.75	-80.09	-57.00	23.09	eirp
2	97.90	9.92	0.45	-93.33	0.46	-82.50	-57.00	25.50	eirp
3	148.34	11.52	0.67	-90.73	3.32	-75.22	-57.00	18.22	eirp
4	159.98	11.20	0.72	-90.02	3.17	-74.93	-57.00	17.93	eirp
5	208.48	8.86	0.92	-88.38	-0.45	-79.05	-57.00	22.05	eirp
6	245.34	11.80	1.08	-91.89	0.06	-78.95	-57.00	21.95	eirp

Remarks: 1. Emission Level = Reading+Antenna Factor+Cable Loss+Site Loss
2. Margin = Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

Above 1GHz

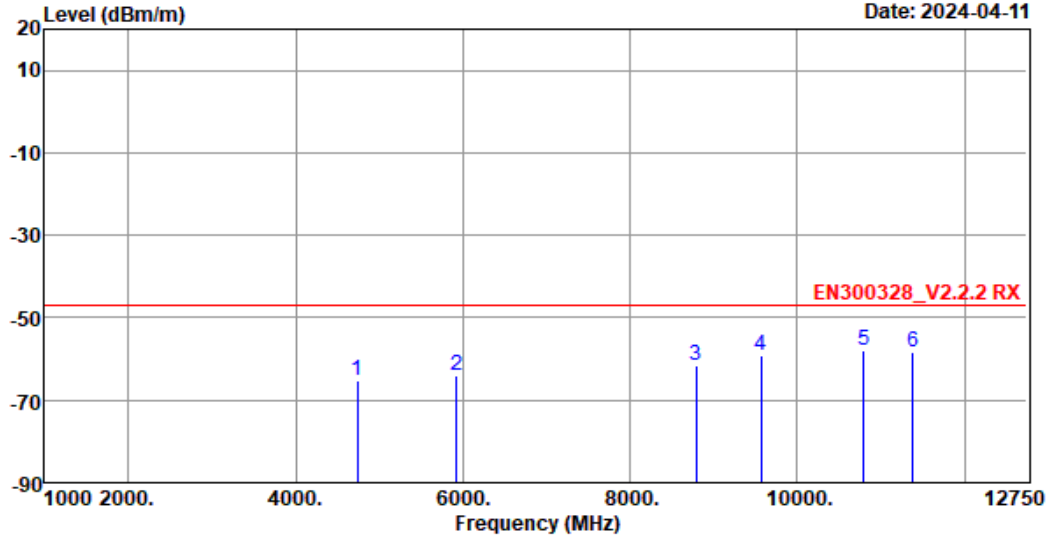
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Fax: +86-769-83081878

Data: 17

File: \\EMC-966-1\test data\2024\RF\Jing Heng\MegaSys 1.EM6 (40)

Date: 2024-04-11



Site no. : 1# 966 Chamber Data no. : 17
Dis. / Ant. : 3m BBHA9120D-2667 Ant. pol. : HORIZONTAL
Limit : EN300328_V2.2.2 RX
Env. / Ins. : Temp:22.8°C;Humi:57%;Press:101.55kPa
Engineer : ZQL
EUT : Active Loudspeaker System
Power : AC 230V/50Hz
M/N : MegaSys 1
Test Mode : RX Mode

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBm)	Site Loss (dB)	Emission Level (dBm)	Limits (dBm)	Margin (dB)	Type
1	4736.50	32.25	5.13	44.55	-61.45	3.26	-65.36	-47.00	18.36	eirp
2	5923.25	33.82	6.11	44.11	-62.20	2.49	-63.89	-47.00	16.89	eirp
3	8790.25	37.75	7.59	43.53	-63.78	0.20	-61.77	-47.00	14.77	eirp
4	9565.75	38.11	7.77	43.63	-63.42	2.01	-59.16	-47.00	12.16	eirp
5	10799.50	38.76	8.16	43.16	-65.03	3.39	-57.88	-47.00	10.88	eirp
6	11387.00	38.86	8.48	42.69	-64.68	1.86	-58.17	-47.00	11.17	eirp

Remarks: 1. Emission Level= Reading+Antenna Factor+Cable Loss-Amp Factor+Site Loss
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

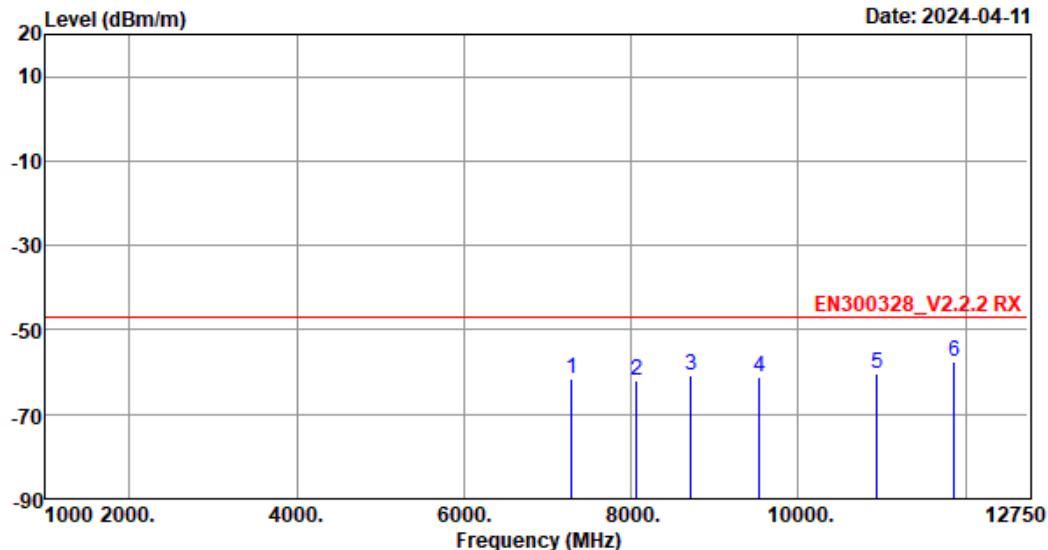
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Tel: +86-769-83081888
Fax: +86-769-83081878

Data: 18

File: \\EMC-966-1\\test data\\2024\\RF\\J\\Jing Heng\\Mega Sys 1.EM6 (40)

Date: 2024-04-11



Site no. : 1# 966 Chamber Data no. : 18
Dis. / Ant. : 3m BBHA9120D-2667 Ant. pol. : VERTICAL
Limit : EN300328_V2.2.2 RX
Env. / Ins. : Temp:22.8°C;Humi:57%;Press:101.55kPa
Engineer : ZQL
EUT : Active Loudspeaker System
Power : AC 230V/50Hz
M/N : MegaSys 1
Test Mode : RX Mode

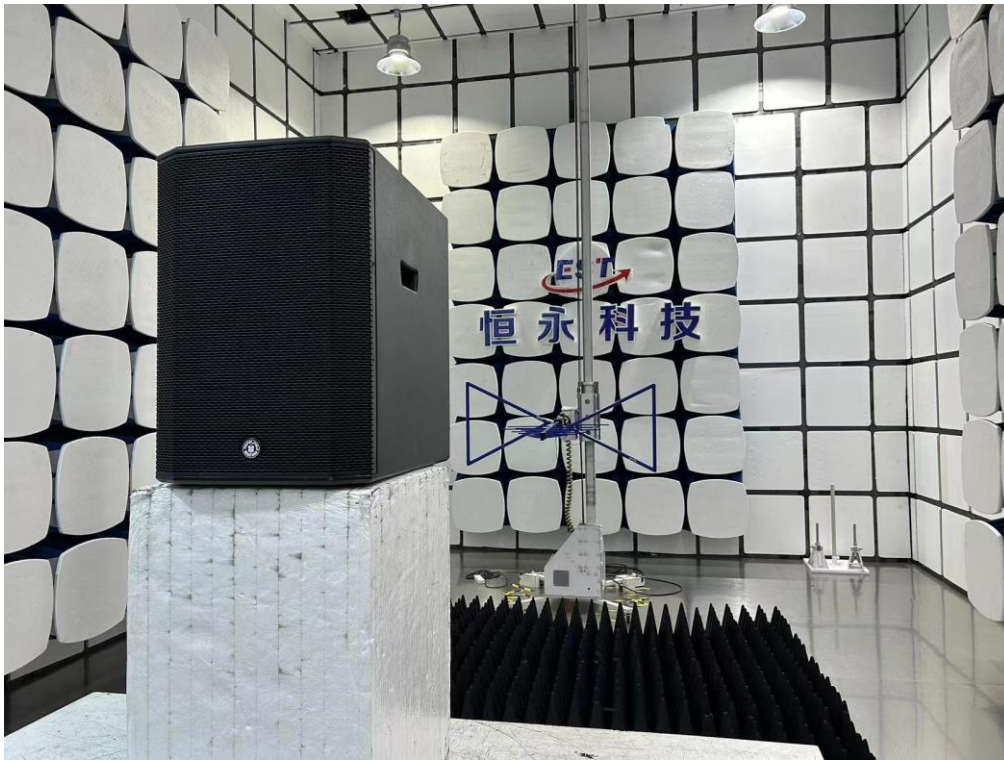
	Freq.	Ant.	Cable	Amp	Site	Emission				
	(MHz)	Factor	Loss	Factor	Reading	Loss	Level	Limits	Margin	Type
		(dB/m)	(dB)	(dB)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	
1	7286.25	36.23	6.69	44.07	-62.02	1.72	-61.45	-47.00	14.45	eirp
2	8061.75	36.87	6.96	43.97	-63.03	1.20	-61.97	-47.00	14.97	eirp
3	8719.75	37.66	7.53	43.57	-63.47	0.93	-60.92	-47.00	13.92	eirp
4	9530.50	38.11	7.77	43.61	-63.68	0.14	-61.27	-47.00	14.27	eirp
5	10940.50	38.86	8.24	43.04	-65.09	0.57	-60.46	-47.00	13.46	eirp
6	11868.75	38.81	8.75	42.31	-65.41	2.58	-57.58	-47.00	10.58	eirp

Remarks: 1. Emission Level= Reading+Antenna Factor+Cable Loss-Amp Factor+Site Loss
2. Margin= Limit - Emission Level.
3. The emission levels that are 20dB below the official limit are not reported.

5. PHOTOGRAPHS OF TEST SETUP

5.1. Setup for Transmitter & Receiver Spurious Emissions

Below 1GHz



Above 1GHz



6.EUT PHOTO

External Photos

M/N: MegaSys 1



External Photos

M/N: MegaSys 1



External Photos

M/N: MegaSys 1



External Photos

M/N: MegaSys 1



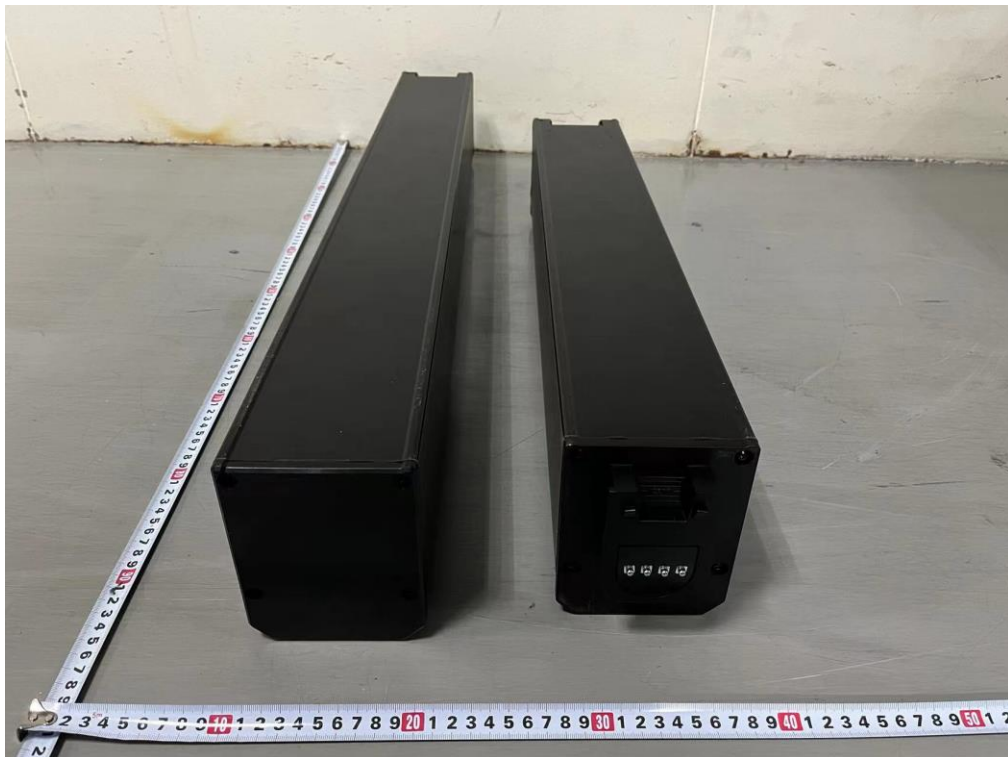
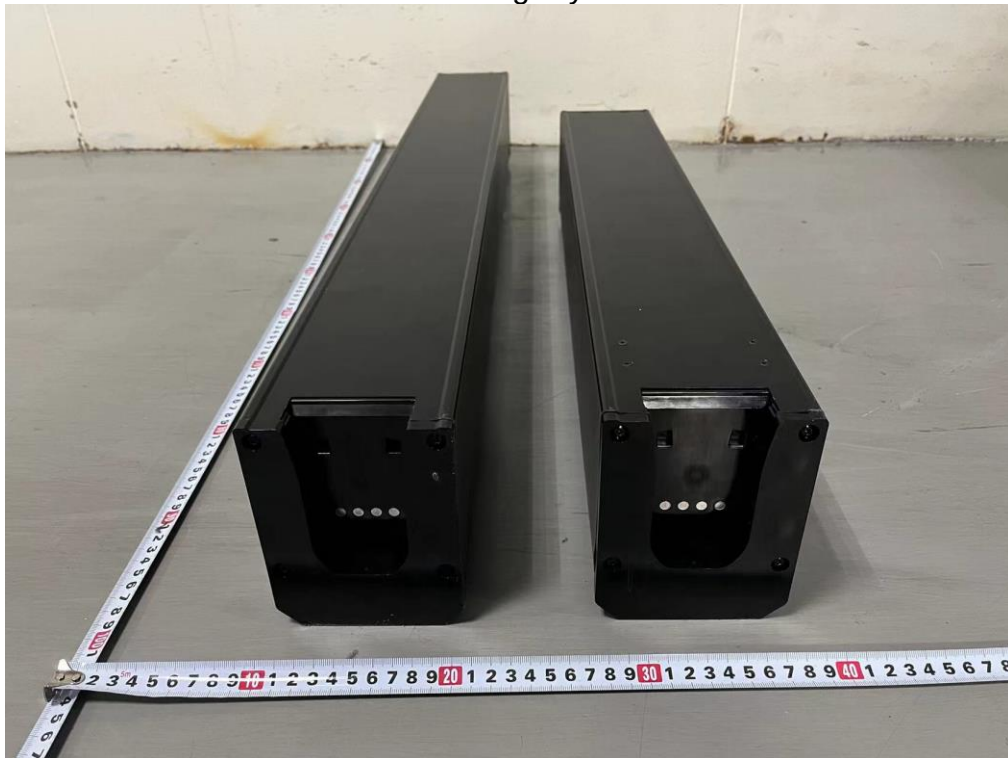
External Photos

M/N: MegaSys 1



External Photos

M/N: MegaSys 1



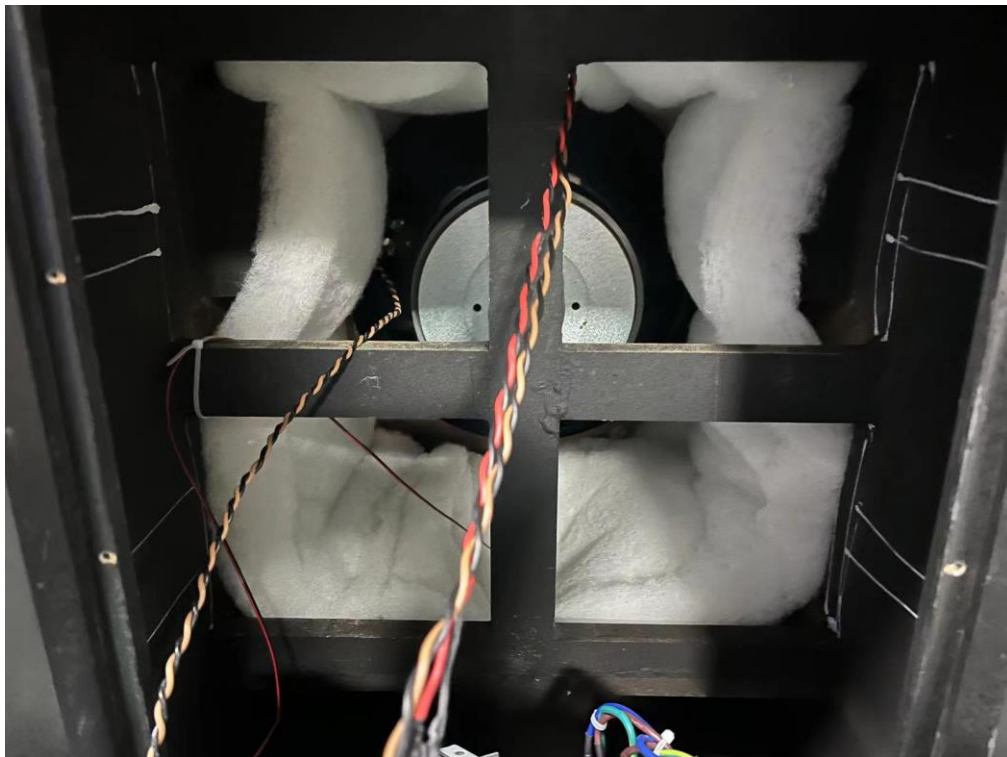
External Photos

M/N: MegaSys 1



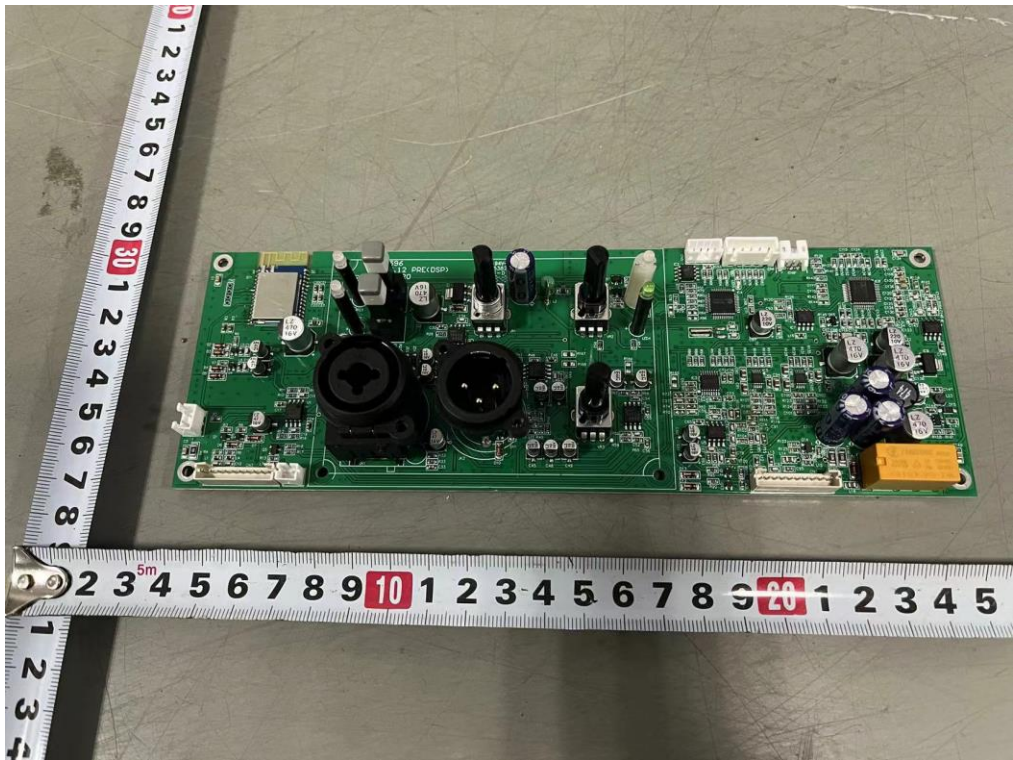
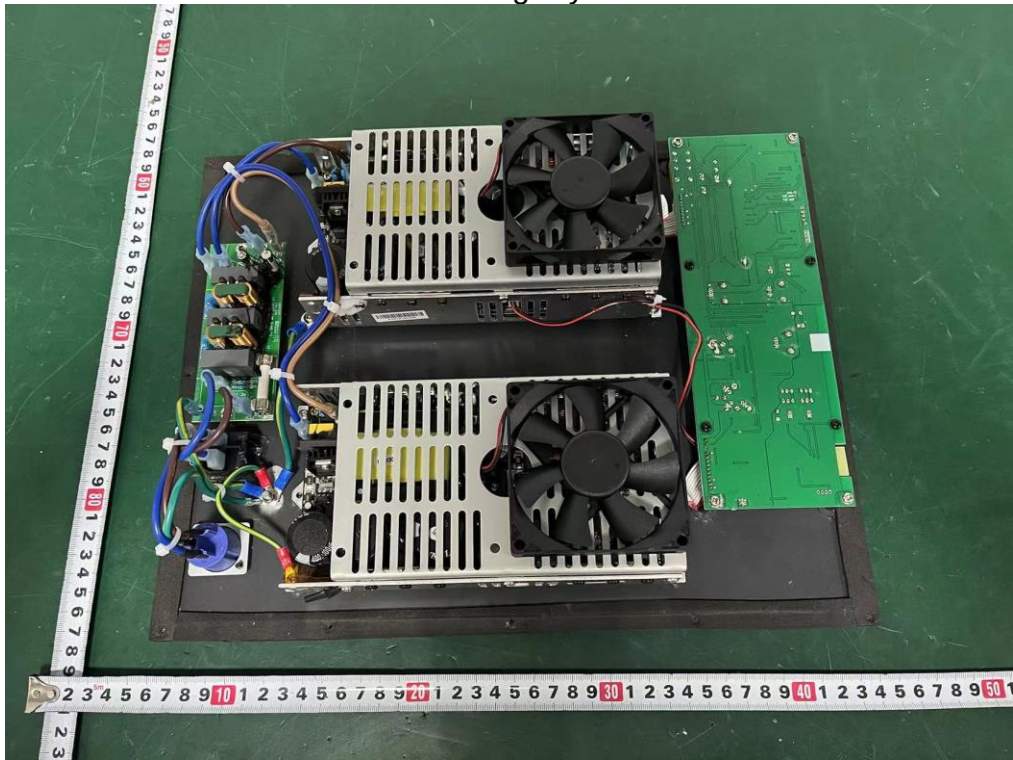
Internal Photos

M/N: MegaSys 1

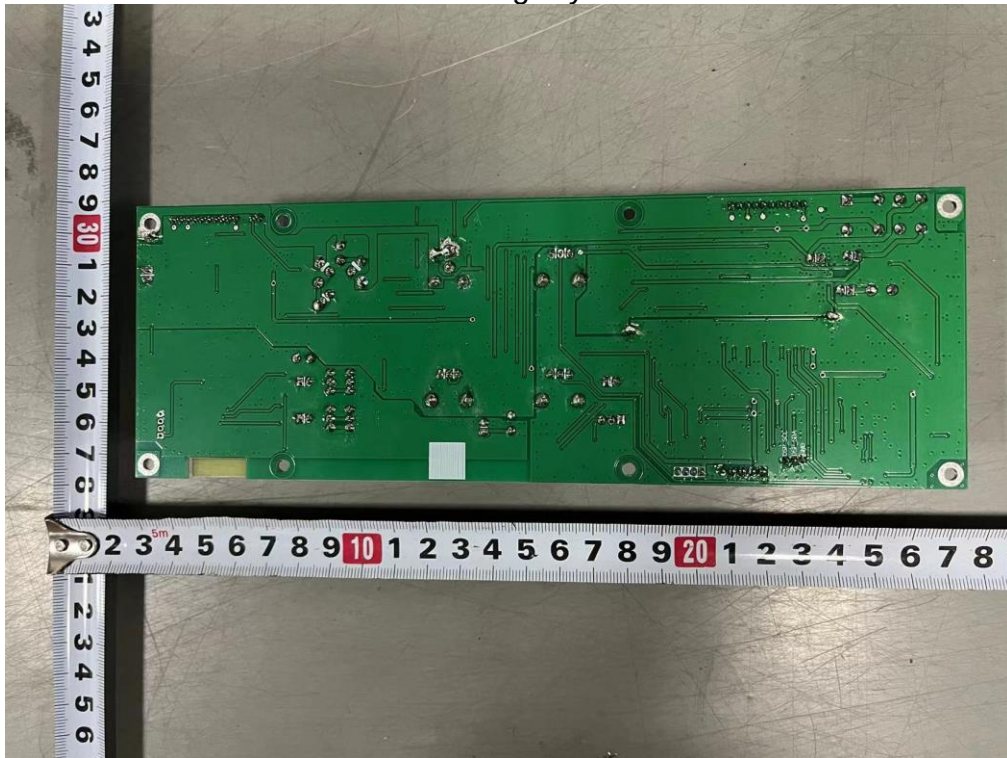


Internal Photos

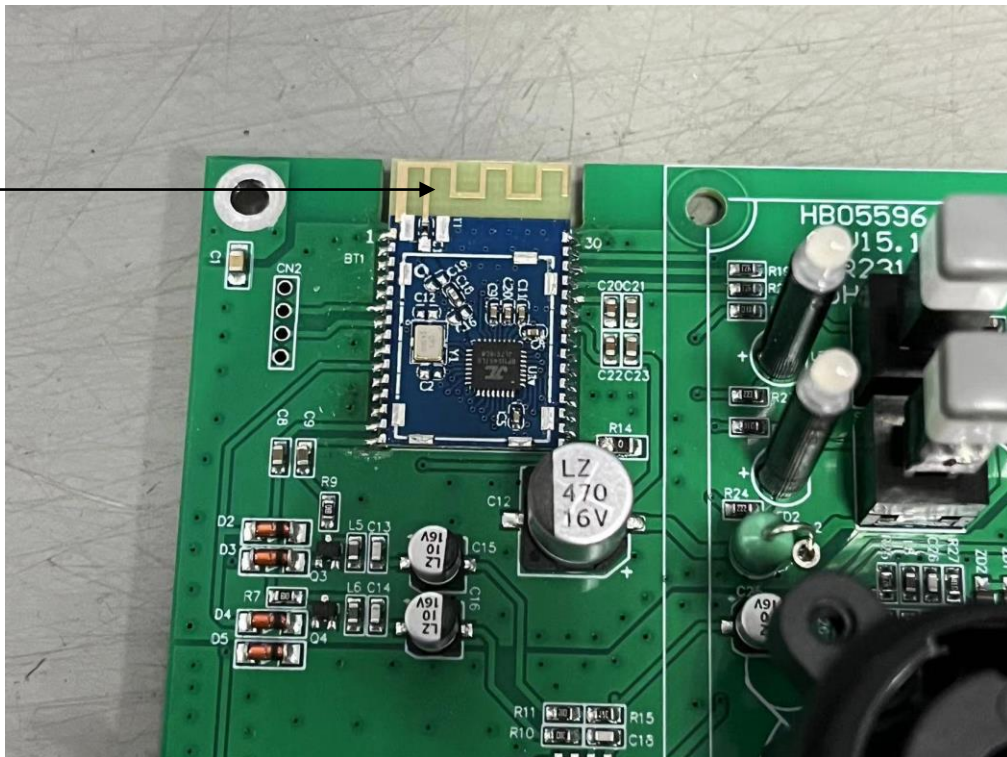
M/N: MegaSys 1



M/N: MegaSys 1

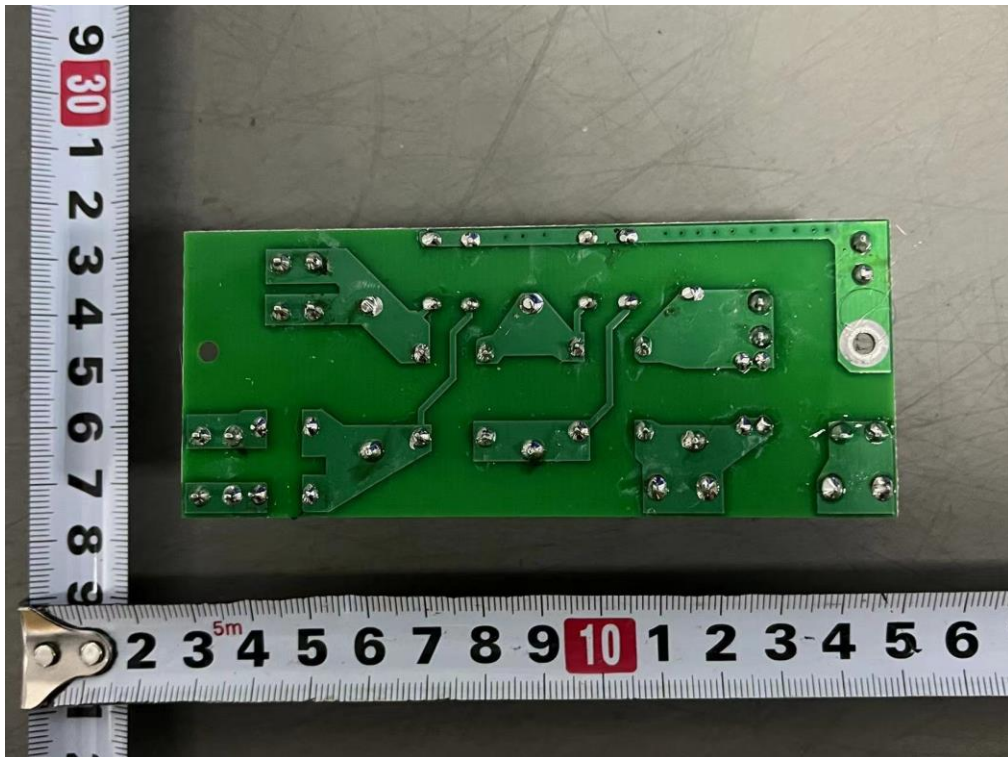
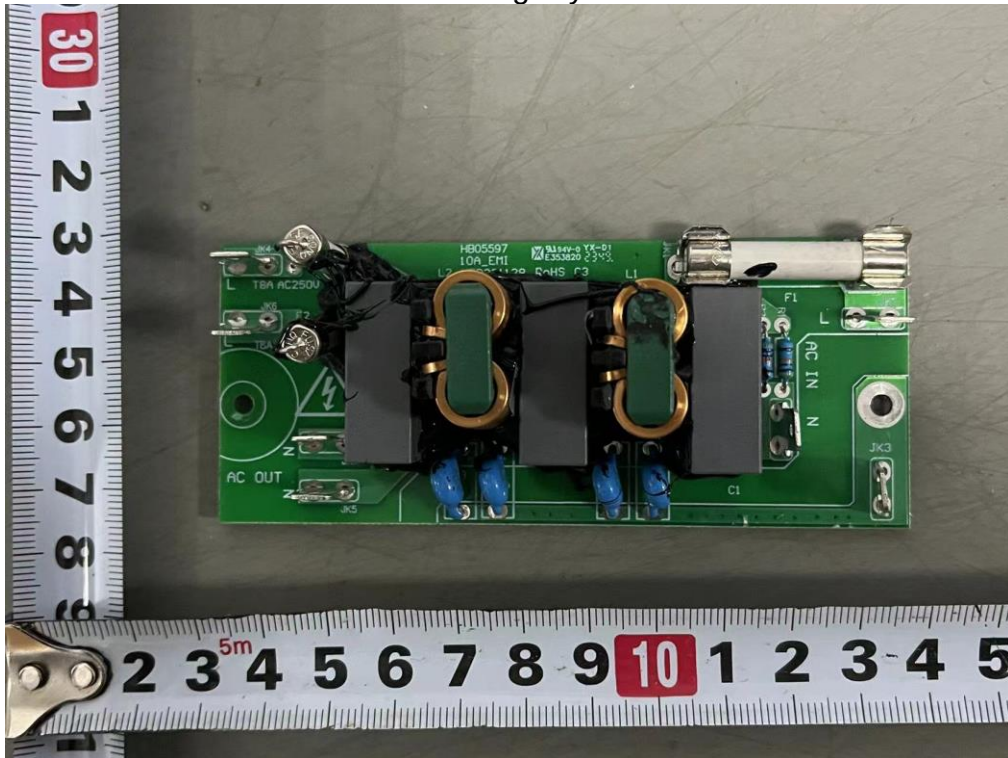


Bluetooth Antenna



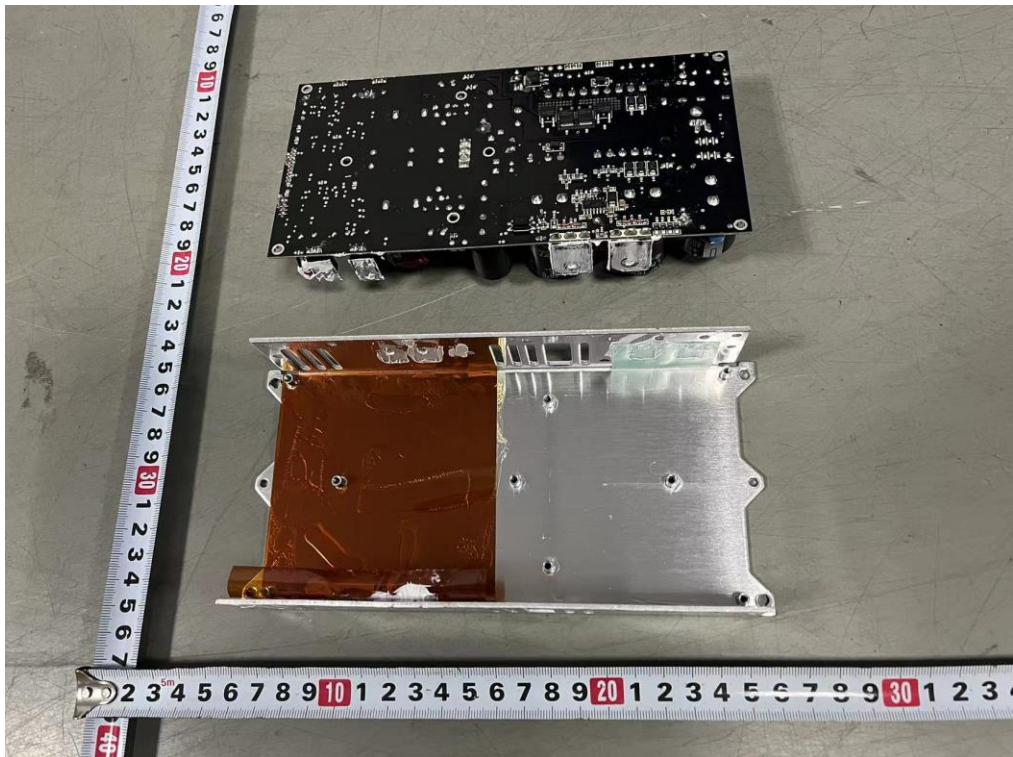
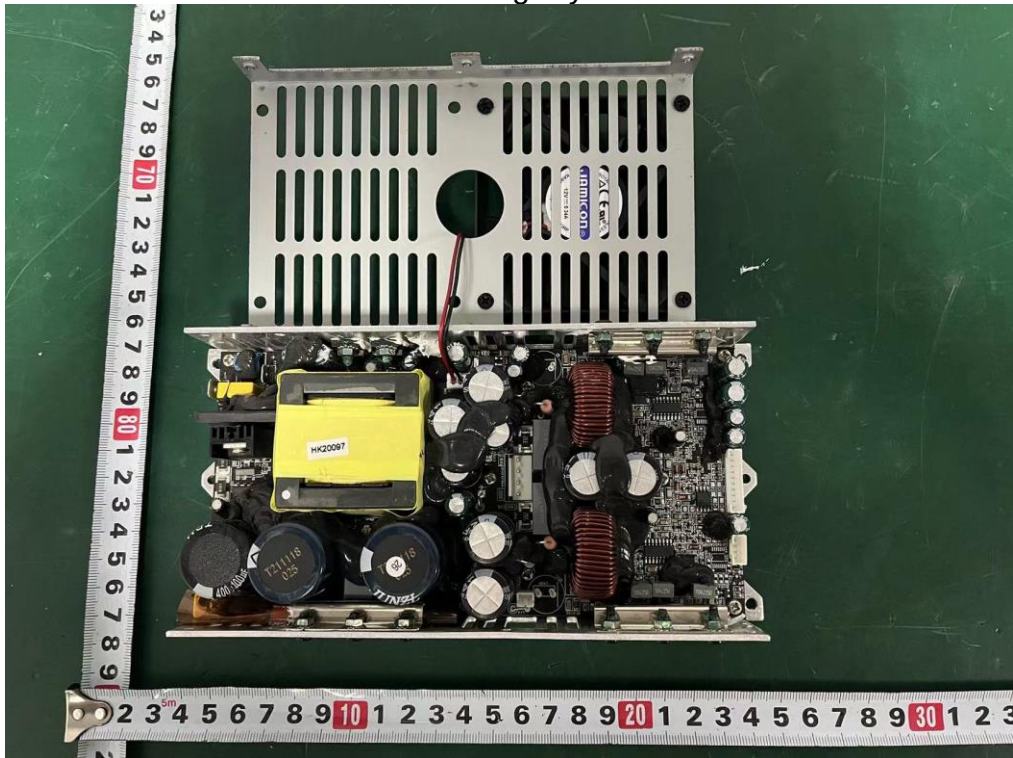
Internal Photos

M/N: MegaSys 1



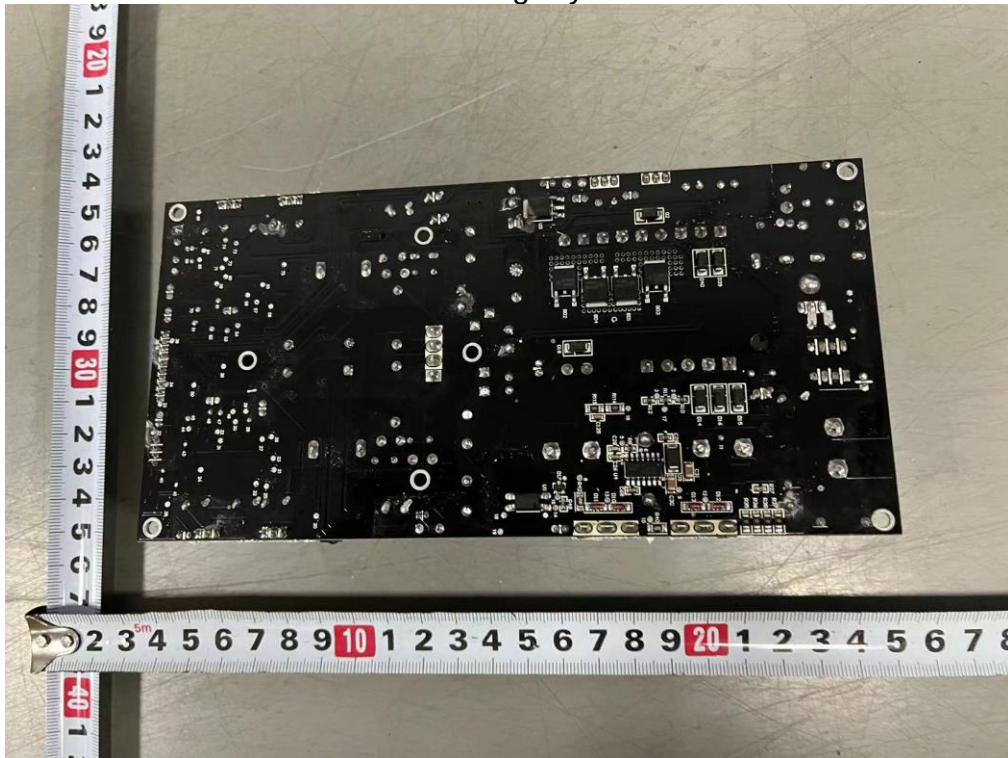
Internal Photos

M/N: MegaSys 1



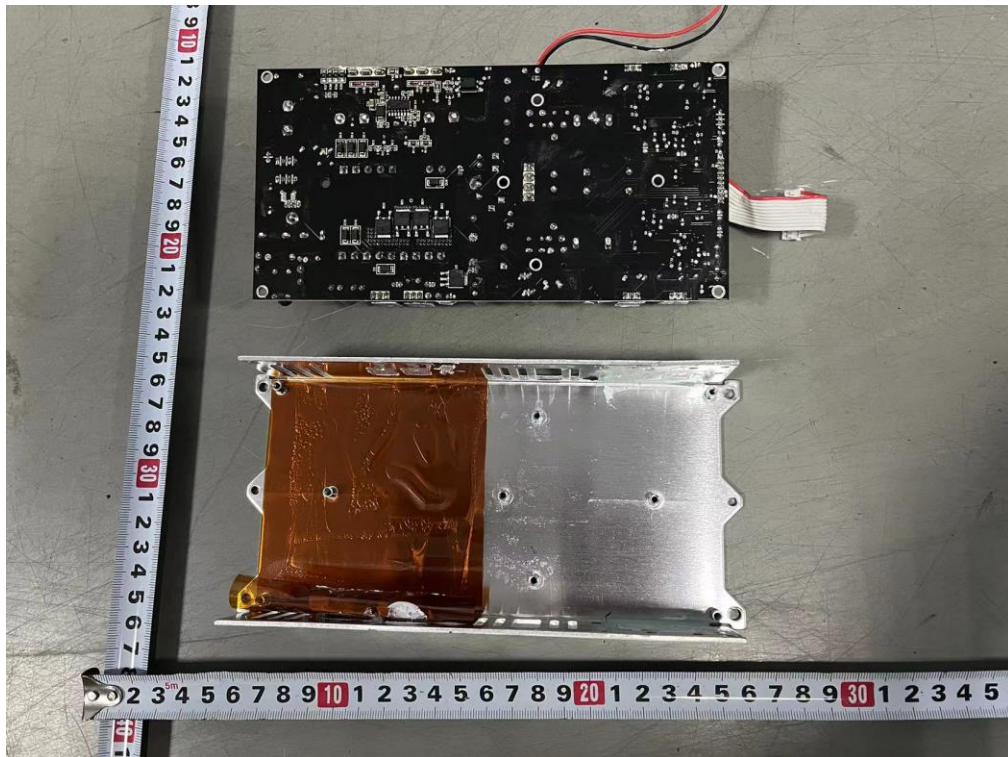
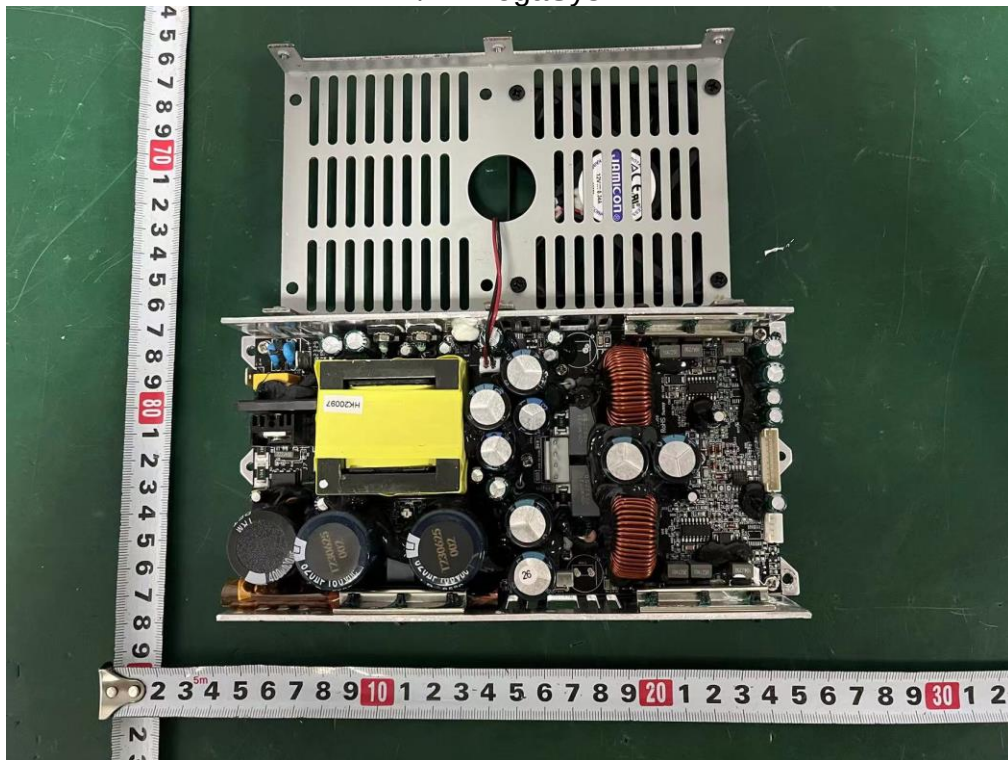
Internal Photos

M/N: MegaSys 1



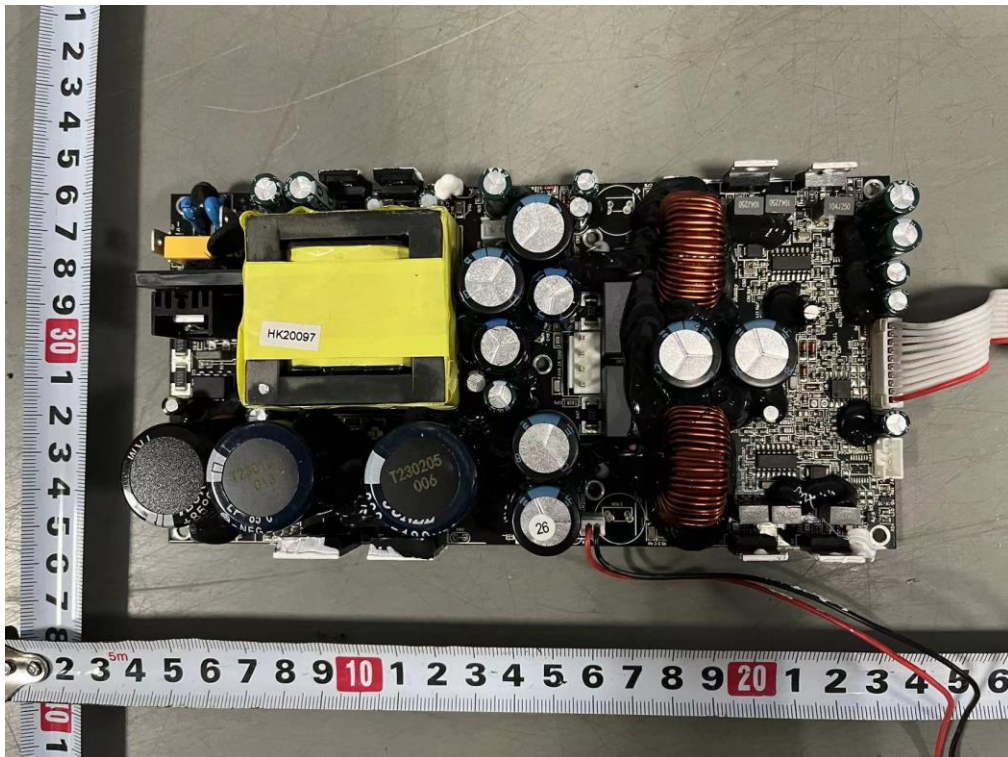
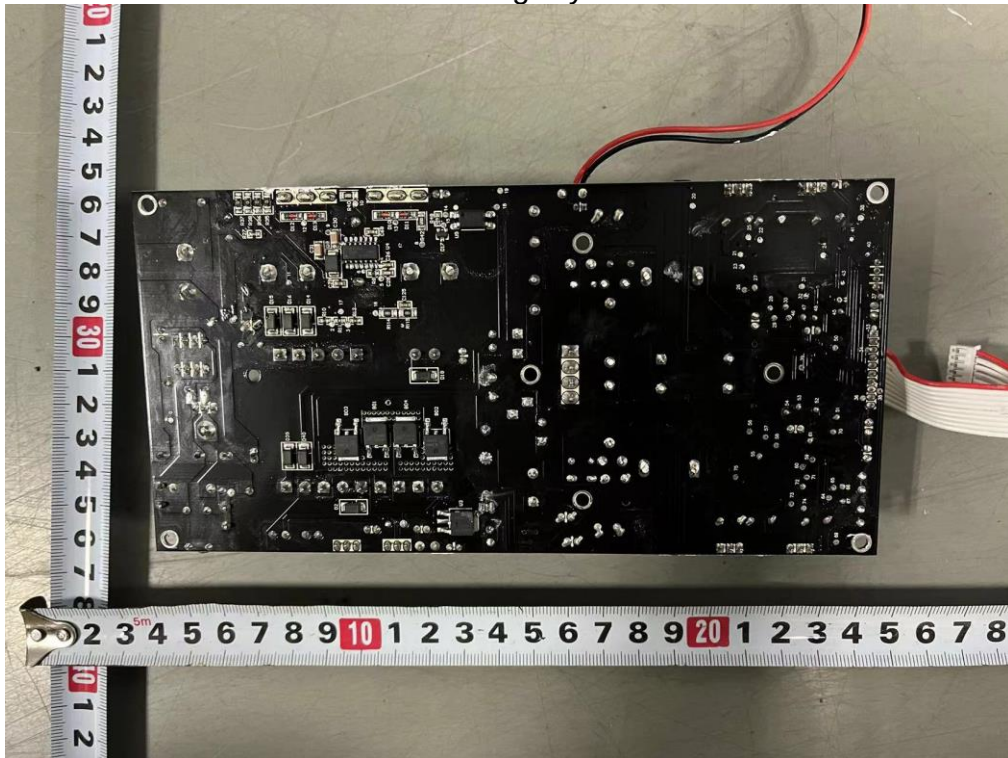
Internal Photos

M/N: MegaSys 1



Internal Photos

M/N: MegaSys 1



End of Test Report