FCC Test Report

Client Name	:	**EcoFlow Inc.**
Client Address	:	**Plant A202, Founder Technology Industrial Park, Shiyan Sub-district, Bao'an District Shenzhen, Guangdong 518000 China**
Product Name	:	**BL262TH9**
Report Date	:	**Dec. 29, 2022**

Shenzhen Anbotek Compliance Laboratory Limited

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TEST REPORT

Applicant	:	EcoFlow Inc.
Manufacturer	:	EcoFlow Inc.
Product Name	:	BL262TH9
Model No.	:	BL262TH9
Trade Mark	:	
Rating(s)	:	Input: 36V⎓

Test Standard(s)	:	**FCC Part15 Subpart, Section 15.247**
Test Method(s)	:	**ANSI C63.10: 2020, KDB558074 D01 DTS Meas Guidance v05r02**

The device described above is tested by Shenzhen Anbotek Compliance Laboratory Limited to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and Shenzhen Anbotek Compliance Laboratory Limited is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) is technically compliant with the FCC Part 15 Subpart C requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of Shenzhen Anbotek Compliance Laboratory Limited.

Date of receipt	Jun. 14, 2022
Date of Test	Jun. 14~Dec. 22, 2022

Prepared By

(TuTu Hong)

Approved & Authorized Signer

(Kingkong Jin)

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1. General Information

1.1. Client Information

Applicant	:	EcoFlow Inc.
Address	:	Plant A202, Founder Technology Industrial Park, Shiyan Sub-district, Bao'an District Shenzhen, Guangdong 518000 China
Manufacturer	:	EcoFlow Inc.
Address	:	Plant A202, Founder Technology Industrial Park, Shiyan Sub-district, Bao'an District Shenzhen, Guangdong 518000 China

1.2. Description of Device (EUT)

Product Name	:	BL262TH9
Model No.	:	BL262TH9
Trade Mark	:	
Test Power Supply	:	Voltage of EUT: AC 120V, 60Hz Output to RF Module: DC 3.3V
Test Sample No.	:	1-2-1(Normal Sample), 1-2-2(Engineering Sample)
Adapter	:	Model: KT180A3600500US Input: 100-240V~50/60Hz 2.5A Output: 36.0⎓5.0A 180.0W
RF Specification		
Support Technology	:	☒ LoRa
Operation Mode	:	☒ DSSS ☐ FHSS
Support Bandwidth	:	☐ 125KHz ☐ 250KHz ☒ 500KHz
Operation Frequency	:	902~928MHz
Number of Channel	:	15 Channels
Modulation Type	:	LoRa Chirp Spread Spectrum
Antenna Type	:	PCB antenna
Antenna Gain(Peak)	:	0.7 dBi(Provided by customer)
Remark: 1) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.		

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1.3. Auxiliary Equipment Used During Test

N/A	:	

1.4. Description of Test Configuration

The system was configured for testing in testing mode, which was provided by manufacturer.
For LoRa mode, Detailed Frequency as below:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	903.0	9	923.4
2	904.6	10	924.0
3	906.2	11	924.6
4	907.8	12	925.2
5	909.4	13	925.8
6	911.0	14	926.4
7	912.6	15	927.0
8	914.2		

Note: EUT was tested with Channel 1, 8 and 15.

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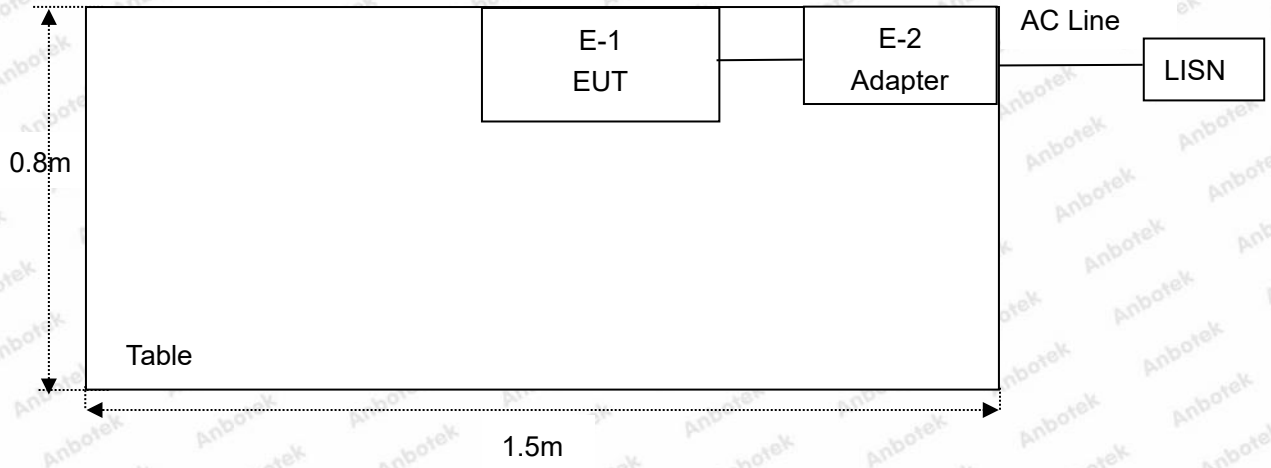
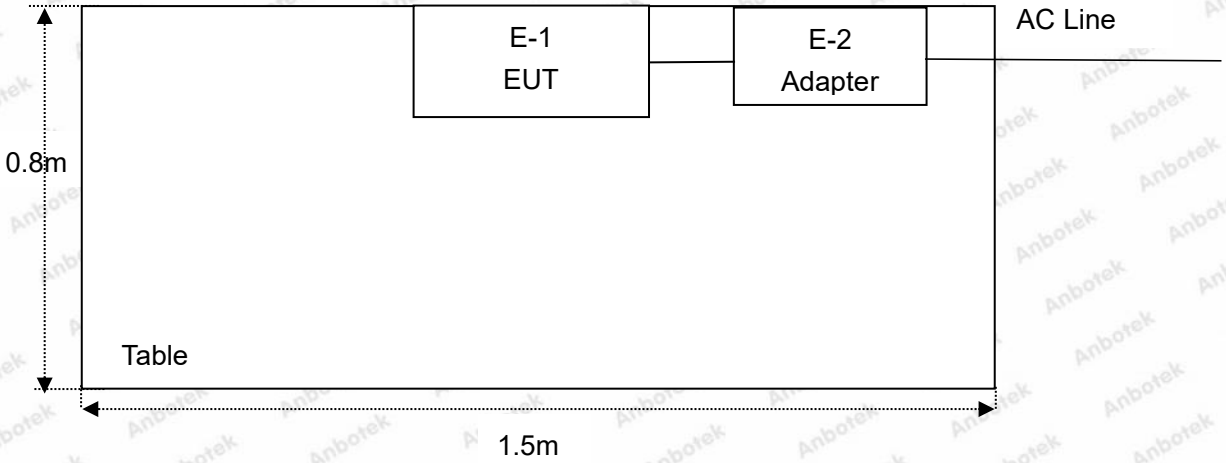
1.5. Description Of Test Setup

CE



RE



1.6. Test Equipment List

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	L.I.S.N. Artificial Mains Network	Rohde & Schwarz	ENV216	100055	Oct. 23, 2022	1 Year
2.	Three Phase V-type Artificial Power Network	CYBERTEK	EM5040DT	E215040DT001	Jul. 05, 2022	1 Year
3.	EMI Test Receiver	Rohde & Schwarz	ESCI	100627	Oct. 13, 2022	1 Year
4.	EMI Test Receiver	Rohde & Schwarz	ESR26	101481	Oct. 23, 2022	1 Year
5.	RF Switching Unit	Compliance Direction	RSU-M2	38303	Oct. 22, 2022	1 Year
6.	MXA Spectrum Analysis	Agilent	N9020A	MY51170037	Oct. 13, 2022	1 Year
7.	EMI Preamplifier	SKET Electronic	LNPA-0118G-45	SKET-PA-002	Oct. 13, 2022	1 Year
8.	Double Ridged Horn Antenna	SCHWARZBECK	BBHA 9120D	02555	Oct. 16, 2022	3 Year
9.	Bilog Broadband Antenna	Schwarzbeck	VULB9163	VULB 9163-289	Oct. 23, 2022	1 Year
10.	Loop Antenna	Schwarzbeck	FMZB1519B	00053	Oct. 23, 2022	1 Year
11.	Horn Antenna	A-INFO	LB-180400-KF	J211060628	Oct. 23, 2022	1 Year
12.	Pre-amplifier	SONOMA	310N	186860	Oct. 23, 2022	1 Year
13.	EMI Test Software EZ-EMC	SHURPLE	N/A	N/A	N/A	N/A
14.	MXA Spectrum Analysis	KEYSIGHT	N9020A	MY53280032	Oct. 13, 2022	1 Year
15.	MXG RF Vector Signal Generator	Agilent	N5182A	MY48180656	Oct. 13, 2022	1 Year
16.	Signal Generator	Agilent	E4421B	MY41000743	Oct. 13, 2022	1 Year
17.	DC Power Supply	IVYTECH	IV3605	1804D360510	Oct. 22, 2022	1 Year
18.	Constant Temperature Humidity Chamber	ZHONGJIAN	ZJ-KHWS80B	N/A	Oct. 19, 2022	1 Year

1.7. Measurement Uncertainty

Radiation Uncertainty	:	Ur = 3.9 dB (Horizontal)
		Ur = 3.8 dB (Vertical)
Conduction Uncertainty	:	Uc = 3.4 dB

1.8. Description of Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

FCC-Registration No.: 184111

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No. 184111.

ISED-Registration No.: 8058A

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (ISED) Innovation, Science and Economic Development Canada. The acceptance letter from the ISED is maintained in our files. Registration 8058A.

Test Location

Shenzhen Anbotek Compliance Laboratory Limited.
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2. Summary of Test Results

Standard Section	Test Item	Result
15.203/15.247(c)	Antenna Requirement	PASS
15.207	Conducted Emission	PASS
15.205/15.209	Spurious Emission	PASS
15.247(b)(3)	Conducted Peak Output Power	PASS
15.247(a)(2)	6dB Occupied Bandwidth	PASS
15.247(e)	Power Spectral Density	PASS
15.247(d)	Band Edge	PASS
Remark: "N/A" is an abbreviation for Not Applicable.		

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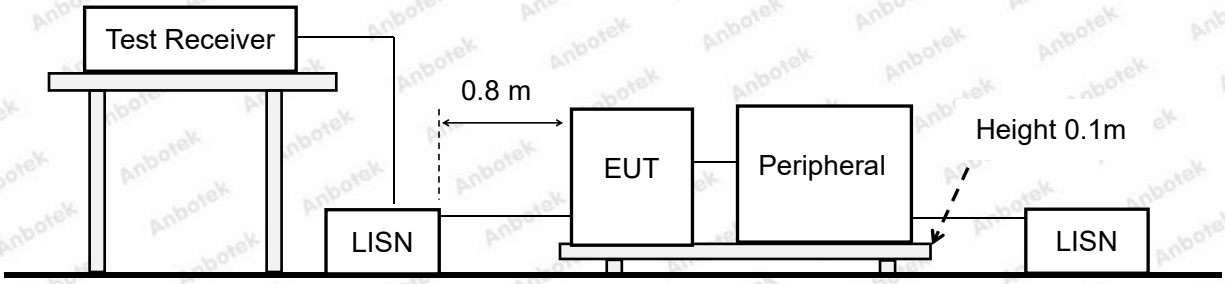
3. Conducted Emission Test

3.1. Test Standard and Limit

Test Standard	FCC Part15 Section 15.207		
Test Limit	Frequency	Maximum RF Line Voltage (dBuV)	
		Quasi-peak Level	Average Level
	150kHz~500kHz	66 ~ 56 *	56 ~ 46 *
	500kHz~5MHz	56	46
	5MHz~30MHz	60	50
Remark: (1) *Decreasing linearly with logarithm of the frequency. (2) The lower limit shall apply at the transition frequency.			

3.2. Test Setup



3.3. Test Procedure

The EUT system is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to FCC ANSI C63.10-2013 on Conducted Emission Measurement.

The bandwidth of test receiver (ESCI) set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

3.4. Test Data

During the test, pre-scan all the modes, only the worst case is recorded in the report.

Please to see the following pages.

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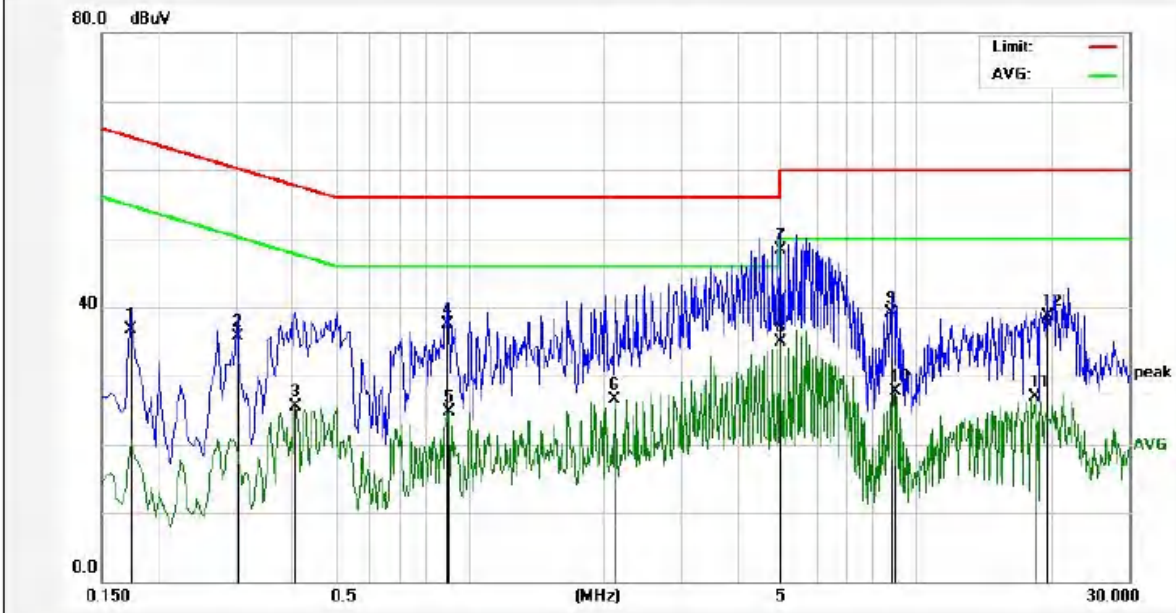
Conducted Emission Test Data

Test Site: 1# Shielded Room
Operating Condition: CH15
Test Specification: AC 120V, 60Hz
Comment: Live Line
Tem.: 22.8℃ Hum.: 50%



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Over Limit (dB)	Detector	Remark
1	0.1740	27.20	9.59	36.79	64.76	-27.97	QP	
2	0.3020	26.01	9.77	35.78	60.19	-24.41	QP	
3	0.4100	15.72	9.76	25.48	47.65	-22.17	AVG	
4	0.8980	27.72	9.84	37.56	56.00	-18.44	QP	
5	0.9020	14.85	9.84	24.69	46.00	-21.31	AVG	
6	2.1180	16.68	9.86	26.54	46.00	-19.46	AVG	
7	4.9699	38.60	9.76	48.36	56.00	-7.64	QP	
8	4.9699	25.13	9.76	34.89	46.00	-11.11	AVG	
9	8.8300	29.36	9.82	39.18	60.00	-20.82	QP	
10	8.9620	17.89	9.82	27.71	50.00	-22.29	AVG	
11	18.4900	16.87	10.09	26.96	50.00	-23.04	AVG	
12	19.6820	28.65	10.12	38.77	60.00	-21.23	QP	

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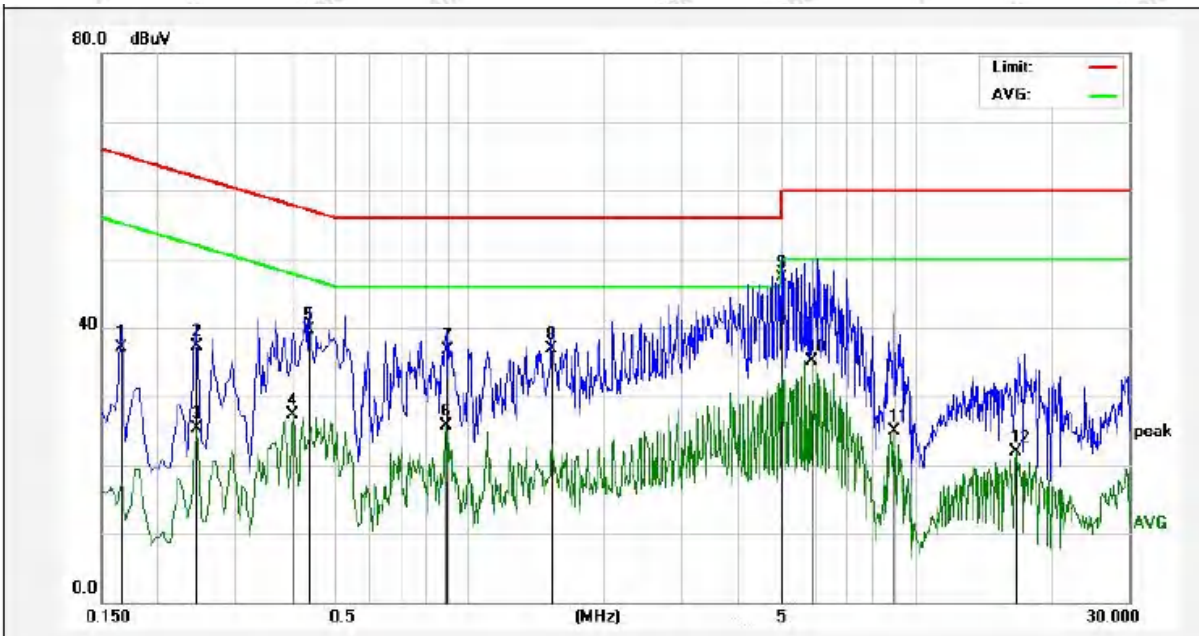
Test Site: 1# Shielded Room
Operating Condition: CH15
Test Specification: AC 120V, 60Hz
Comment: Neutral Line
Tem.: 22.8℃ Hum.: 50%



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Over Limit (dB)	Detector	Remark
1	0.1660	27.60	9.58	37.18	65.15	-27.97	QP	
2	0.2460	27.63	9.64	37.27	61.89	-24.62	QP	
3	0.2460	15.76	9.64	25.40	51.89	-26.49	AVG	
4	0.4020	17.50	9.76	27.26	47.81	-20.55	AVG	
5	0.4380	29.93	9.80	39.73	57.10	-17.37	QP	
6	0.8860	15.96	9.84	25.80	46.00	-20.20	AVG	
7	0.8940	26.90	9.84	36.74	56.00	-19.26	QP	
8	1.5300	27.07	9.85	36.92	56.00	-19.08	QP	
9	5.0299	37.54	9.76	47.30	60.00	-12.70	QP	
10	5.8499	25.27	9.78	35.05	50.00	-14.95	AVG	
11	8.9179	14.99	9.82	24.81	50.00	-25.19	AVG	
12	16.8059	11.87	10.04	21.91	50.00	-28.09	AVG	

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4. Radiation Spurious Emission and Band Edge

4.1. Test Standard and Limit

Test Standard	FCC Part15 C Section 15.209 and 15.205				
Test Limit	Frequency (MHz)	Field strength (microvolt/meter)	Limit (dBuV/m)	Remark	Measurement distance (m)
	0.009MHz~0.490MHz	2400/F(kHz)	-	-	300
	0.490MHz-1.705MHz	24000/F(kHz)	-	-	30
	1.705MHz-30MHz	30	-	-	30
	30MHz~88MHz	100	40.0	Quasi-peak	3
	88MHz~216MHz	150	43.5	Quasi-peak	3
	216MHz~960MHz	200	46.0	Quasi-peak	3
	960MHz~1000MHz	500	54.0	Quasi-peak	3
	Above 1000MHz	500	54.0	Average	3
		-	74.0	Peak	3
Remark: (1)The lower limit shall apply at the transition frequency. (2) 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.					

4.2. Test Setup

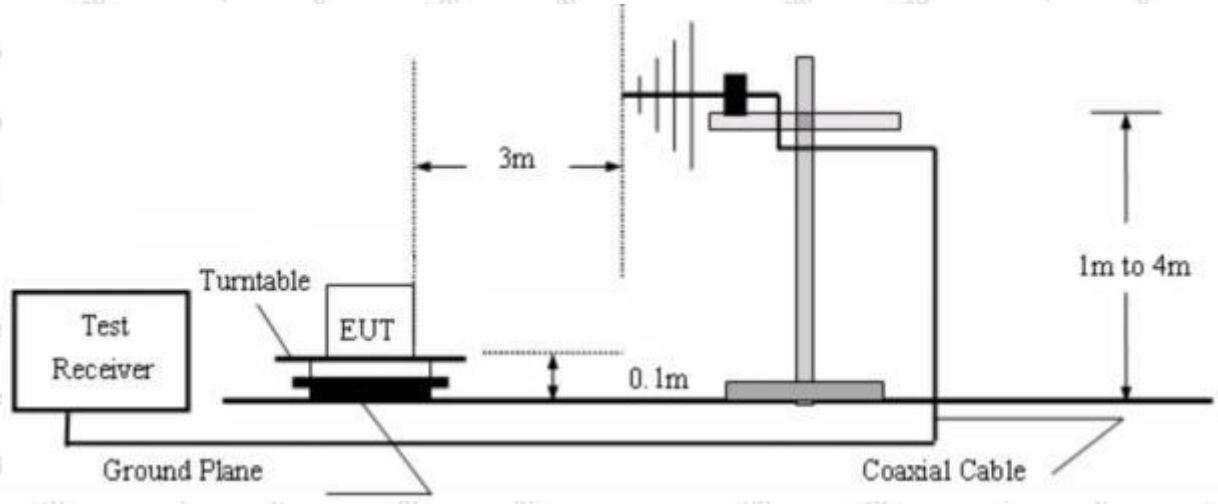

Figure 1. 30MHz to 1GHz

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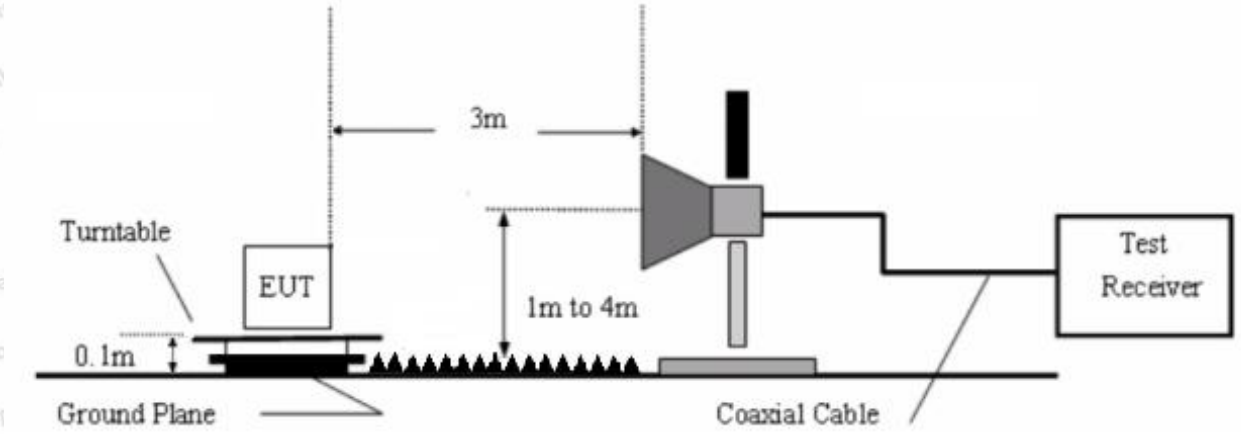

Figure 2. Above 1 GHz

4.3. Test Procedure

For below 1GHz: The EUT is placed on a turntable, which is 0.1m above the ground plane.
For above 1GHz: The EUT is placed on a turntable, which is 0.1m above the ground plane.
The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna which is mounted on a antenna tower. The antenna can be moved up and down from 1 to 4 meters to find out the maximum emission level. Rotated the EUT through three orthogonal axes to determine the maximum emissions, both horizontal and vertical polarization of the antenna are set on test. The EUT is tested in 9*6*6 Chamber. The device is evaluated in xyz orientation.
For the radiated emission test above 1GHz:
Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.

For 9kHz to 150kHz, Set the spectrum analyzer as:
RBW = 200Hz, VBW =1kHz, Detector= Quasi-Peak, Trace mode= Max hold, Sweep- auto couple.

For 150kHz to 30MHz, Set the spectrum analyzer as:
RBW = 9KHz, VBW =30kHz, Detector= Quasi-Peak, Trace mode= Max hold, Sweep- auto couple.

For 30MHz to 1000MHz, Set the spectrum analyzer as:
RBW = 100kHz, VBW =300kHz,Detector= Quasi-Peak, Trace mode= Max hold, Sweep- auto couple.

For above 1GHz,Set the spectrum analyzer as:

RBW =1MHz, VBW =1MHz, Detector= Peak, Trace mode= Max hold, Sweep- auto couple.

RBW =1MHz, VBW =10Hz, Detector= Average, Trace mode= Max hold, Sweep- auto couple.

4.4. Test Data

PASS

The test results of 9kHz-30MHz was attenuated more than 20dB below the permissible limits, so the results don't record in the report.

During the test, pre-scan all the modes, only the worst case is recorded in the report.

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Test Results (30~1000MHz)

Test Mode: CH15

Power Source: AC 120V, 60Hz

Polarization: Vertical

Temp.(℃)/Hum.(%RH): 24.3℃/49%RH

Fundamental of Lora

No.	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	52.9453	53.06	-16.86	36.20	40.00	-3.80	QP			
2	60.7043	53.03	-17.75	35.28	40.00	-4.72	QP			
3	102.3597	55.90	-16.95	38.95	43.50	-4.55	QP			
4	167.2366	61.17	-21.26	39.91	43.50	-3.59	QP			
5	271.3245	46.28	-17.22	29.06	46.00	-16.94	QP			
6	396.2412	45.69	-14.48	31.21	46.00	-14.79	QP			

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Test Mode: CH15

Power Source: AC 120V, 60Hz

Polarization: Horizontal

Temp.(℃)/Hum.(%RH): 24.3℃/49%RH

Fundamental of Lora

No.	Freq. (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	44.4307	42.52	-15.29	27.23	40.00	-12.77	QP			
2	59.0251	51.80	-17.52	34.28	40.00	-5.72	QP			
3	108.6470	47.63	-22.94	24.69	43.50	-18.81	QP			
4	166.6511	62.95	-23.74	39.21	43.50	-4.29	QP			
5	262.8955	54.90	-20.38	34.52	46.00	-11.48	QP			
6	400.4318	47.78	-16.14	31.64	46.00	-14.36	QP			

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Test Results (1GHz-25GHz)

Test Mode: CH01					Test channel: Lowest			
Frequency (MHz)	Antenna Pol.	Reading (dBuV/m)	Cable Loss (dB)	Ant Factor (dB)	Amplifier (dB)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Det. Mode
1806.000	H	42.47	7.39	28.73	26.31	52.28	74	-21.72	PK
1806.000	H	34.38	7.39	28.73	26.31	44.19	54	-9.81	AV
2709.000	H	42.69	8.10	29.71	27.01	53.49	74	-20.51	PK
2709.000	H	33.53	8.10	29.71	27.01	44.33	54	-9.67	AV
3612.000	H	--	--	--	--	--	--	--	PK
3612.000	H	--	--	--	--	--	--	--	AV
1806.000	V	43.68	7.39	28.73	26.31	53.49	74	-20.51	PK
1806.000	V	34.94	7.39	28.73	26.31	44.75	54	-9.25	AV
2709.000	V	42.38	8.10	29.71	27.01	53.18	74	-20.82	PK
2709.000	V	35.02	8.10	29.71	27.01	45.82	54	-8.18	AV
3612.000	V	--	--	--	--	--	--	--	PK
3612.000	V	--	--	--	--	--	--	--	AV

Test Mode: CH08					Test channel: Middle			
Frequency (MHz)	Antenna Pol.	Reading (dBuV/m)	Cable Loss (dB)	Ant Factor (dB)	Amplifier (dB)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Det. Mode
1828.400	H	47.25	7.41	28.72	26.31	57.07	74	-16.93	PK
1828.400	H	36.30	7.41	28.72	26.31	46.12	54	-7.88	AV
2742.600	H	45.69	8.11	29.71	27.01	56.50	74	-17.50	PK
2742.600	H	34.25	8.11	29.71	27.01	45.06	54	-8.94	AV
3656.800	H	--	--	--	--	--	--	--	PK
3656.800	H	--	--	--	--	--	--	--	AV
1828.400	V	47.56	7.41	28.72	26.31	57.38	74	-16.62	PK
1828.400	V	36.33	7.41	28.72	26.31	46.15	54	-7.85	AV
2742.600	V	45.50	8.11	29.71	27.01	56.31	74	-17.69	PK
2742.600	V	35.66	8.11	29.71	27.01	46.47	54	-7.53	AV
3656.800	V	--	--	--	--	--	--	--	PK
3656.800	V	--	--	--	--	--	--	--	AV

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Test Mode: CH16					Test channel: High				
Frequency (MHz)	Antenna Pol.	Reading (dBuV/m)	Cable Loss (dB)	Ant Factor (dB)	Amplifier (dB)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Det. Mode
1854.000	H	46.67	7.43	28.69	26.31	56.48	74	-17.52	PK
1854.000	H	35.61	7.43	28.69	26.31	45.42	54	-8.58	AV
2781.000	H	45.59	8.15	29.84	27.01	56.57	74	-17.43	PK
2781.000	H	35.10	8.15	29.84	27.01	46.08	54	-7.92	AV
3708.000	H	--	--	--	--	--	--	--	PK
3708.000	H	--	--	--	--	--	--	--	AV
1854.000	V	46.62	7.43	28.69	26.31	56.43	74	-17.57	PK
1854.000	V	36.42	7.43	28.69	26.31	46.23	54	-7.77	AV
2781.000	V	46.22	8.15	29.84	27.01	57.20	74	-16.80	PK
2781.000	V	34.43	8.15	29.84	27.01	45.41	54	-8.59	AV
3708.000	V	--	--	--	--	--	--	--	PK
3708.000	V	--	--	--	--	--	--	--	AV

Remark:

1. Level =Reading + Ant Factor + Cable Loss – Amplifier
2. “*” means the test results were attenuated more than 20dB below the permissible limits, so the results don't record in the report.

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Radiated Band Edge:

Frequency (MHz)	Read Level (dBuV/m)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Det.
902.0000	42.58	22.45	4.48	31.33	38.18	46.00	-7.82	H	QP
928.0000	40.69	22.59	4.54	31.35	36.47	46.00	-9.53	H	QP
902.0000	43.86	22.45	4.48	31.33	39.46	46.00	-6.54	V	QP
928.0000	40.10	22.59	4.54	31.35	35.88	46.00	-10.12	V	QP

Remark:

1. Level =Read level + Antenna Factor + Cable Loss – Preamp Factor

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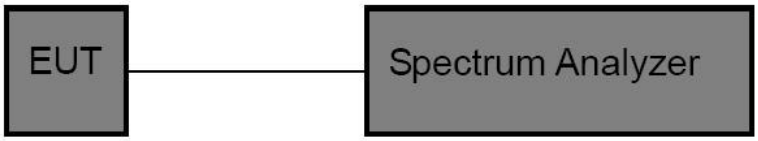
5. Maximum Peak Output Power Test

5.1. Test Standard and Limit

Test Standard	FCC Part15 C Section 15.247 (b)(3)
Test Limit	30dBm

5.2. Test Setup



5.3. Test Procedure

This procedure shall be used when the measurement instrument has available a resolution bandwidth that is greater than the DTS bandwidth.

1. Set the RBW ≥DTS bandwidth.
2. Set the VBW≥3*RBW.
3. Set the span≥ 3*RBW.
4. Detector = peak.
5. Sweep time = auto couple.
6. Trace mode = max hold.
7. Allow trace to fully stabilize.
8. Use peak marker function to determine the peak amplitude level.

5.4. Test Data

Test Item	:	Max. peak output power	Test Mode	:	CH Low ~ CH High
Test Voltage	:	DC 3.3V	Temperature	:	23.6℃
Test Result	:	PASS	Humidity	:	53 %

Channel Frequency (MHz)	Peak Power output (dBm)	Limit (dBm)	Results
903.0	20.664	30.00	PASS
914.2	21.153	30.00	PASS
927.0	21.782	30.00	PASS

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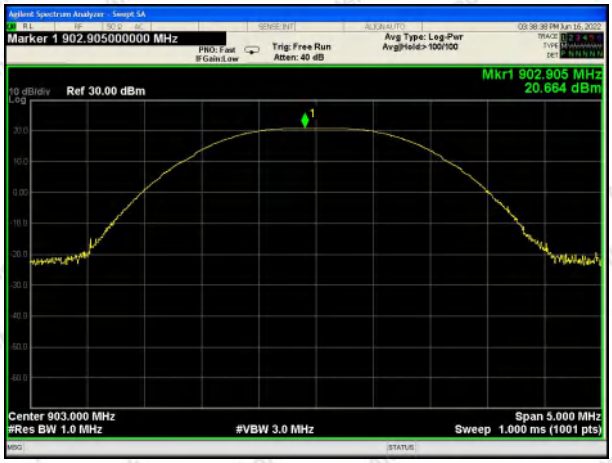
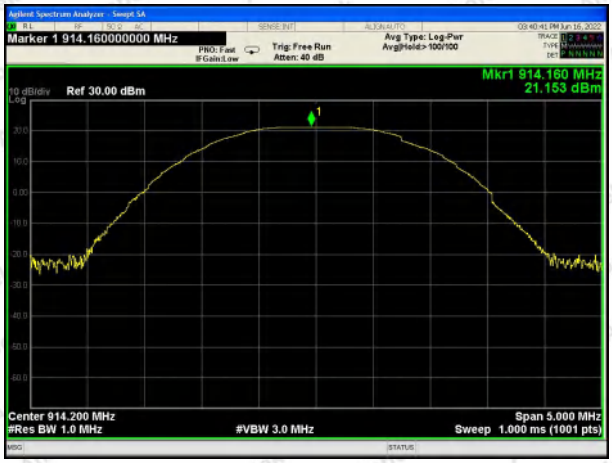
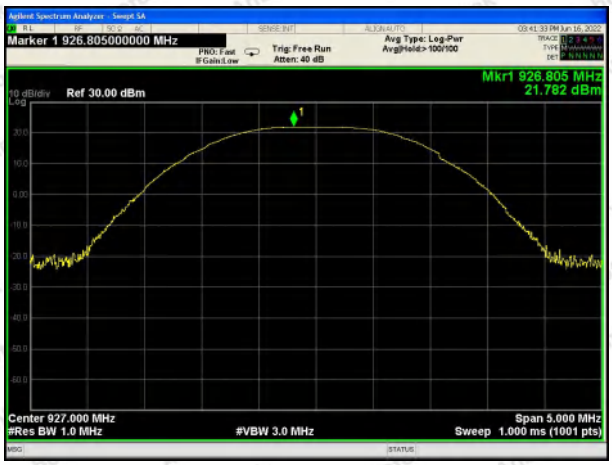


CH: Low



CH: Middle



CH: High

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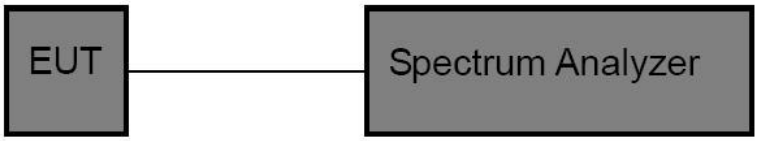
6. 6DB Occupy Bandwidth Test

6.1. Test Standard and Limit

Test Standard	FCC Part15 C Section 15.247 (a)(2)
Test Limit	>500kHz

6.2. Test Setup



6.3. Test Procedure

1. Place the EUT on the table and set it in the transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
3. Set the spectrum analyzer as:
RBW = 100kHz, VBW≥3*RBW =300kHz,
Detector= Peak
Trace mode= Max hold.
Sweep- auto couple.
4. Mark the peak frequency and –6dB (upper and lower) frequency.
5. Repeat until all the rest channels are investigated.

6.4. Test Data

Test Item	:	6dB Bandwidth	Test Mode	:	CH Low ~ CH High
Test Voltage	:	DC 3.3V	Temperature	:	23.6℃
Test Result	:	PASS	Humidity	:	53 %

Channel	Frequency(MHz)	Bandwidth (kHz)	Limit (kHz)	Results
Low	903.0	634.4	>500	PASS
Middle	914.2	639.3		PASS
High	927.0	641.7		PASS

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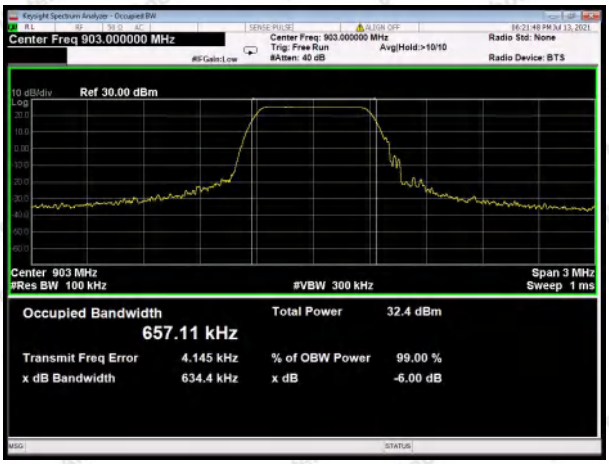
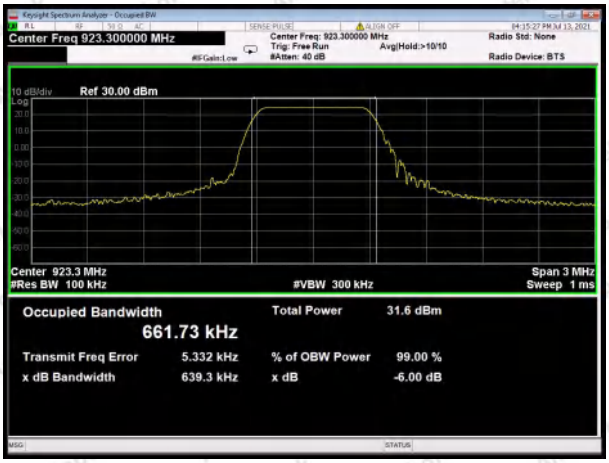
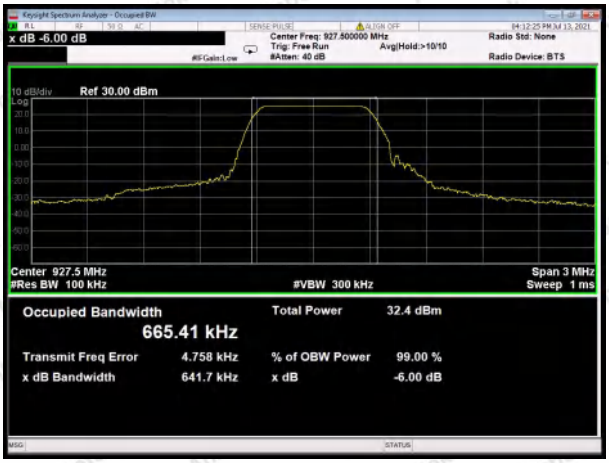


CH: Low



CH: Middle



CH: High

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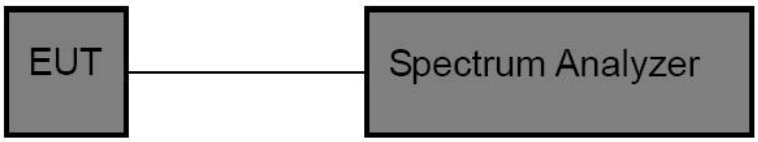
7. Power Spectral Density Test

7.1. Test Standard and Limit

Test Standard	FCC Part15 C Section 15.247 (e)
Test Limit	8dBm/3KHz

7.2. Test Setup



7.3. Test Procedure

1. Place the EUT on the table and set it in transmitting mode. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
2. Set the spectrum analyzer as RBW = 3kHz, VBW = 10kHz, Span = 1.5xDTS BW
3. Record the max. reading.
4. Repeat the above procedure until the measurements for all frequencies are completed.

7.4. Test Data

Test Item	:	Power Spectral Density	Test Mode	:	CH Low ~ CH High
Test Voltage	:	DC 3.3V	Temperature	:	23.6℃
Test Result	:	PASS	Humidity	:	53 %

Channel	Frequency (MHz)	PSD (dBm/3KHz)	Limit (dBm/3KHz)	Results
Low	903.0	-11.508	8.00	PASS
Middle	914.2	-12.310	8.00	PASS
High	927.0	-9.696	8.00	PASS

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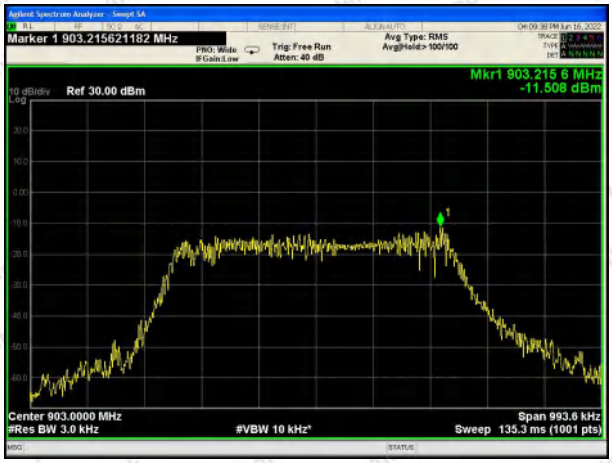
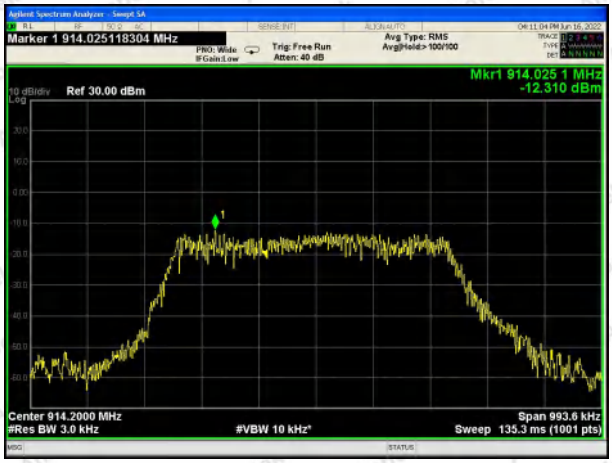
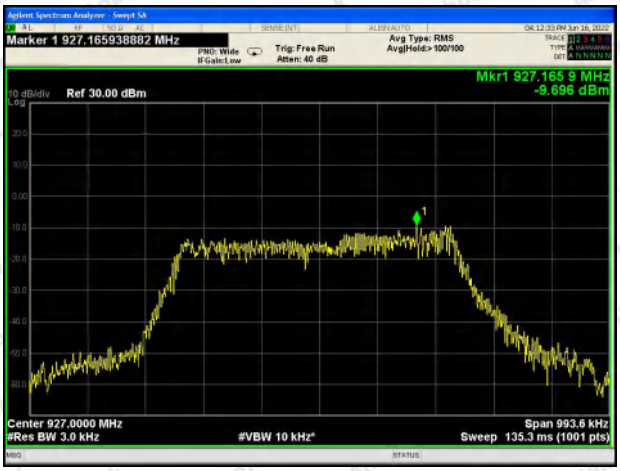


CH: Low



CH: Middle



CH: High

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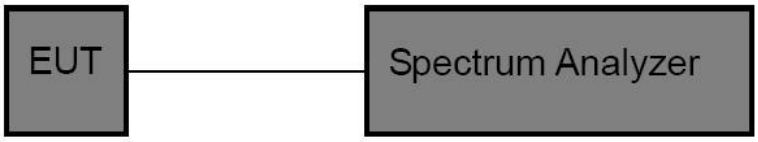
8. 100kHz Bandwidth of Frequency Band Edge Requirement

8.1. Test Standard and Limit

Test Standard	FCC Part15 C Section 15.247 (d)
Test Limit	in any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in15.209(a).

8.2. Test Setup



8.3. Test Procedure

Using the following spectrum analyzer setting:
1. Set the RBW = 100KHz.
2. Set the VBW = 300KHz.
3. Sweep time = auto couple.
4. Detector function = peak.
5. Trace mode = max hold.
6. Allow trace to fully stabilize.

8.4. Test Data

Test Item	:	Band edge	Test Mode	:	CH Low ~ CH High
Test Voltage	:	DC 3.3V	Temperature	:	23.6℃
Test Result	:	PASS	Humidity	:	53 %

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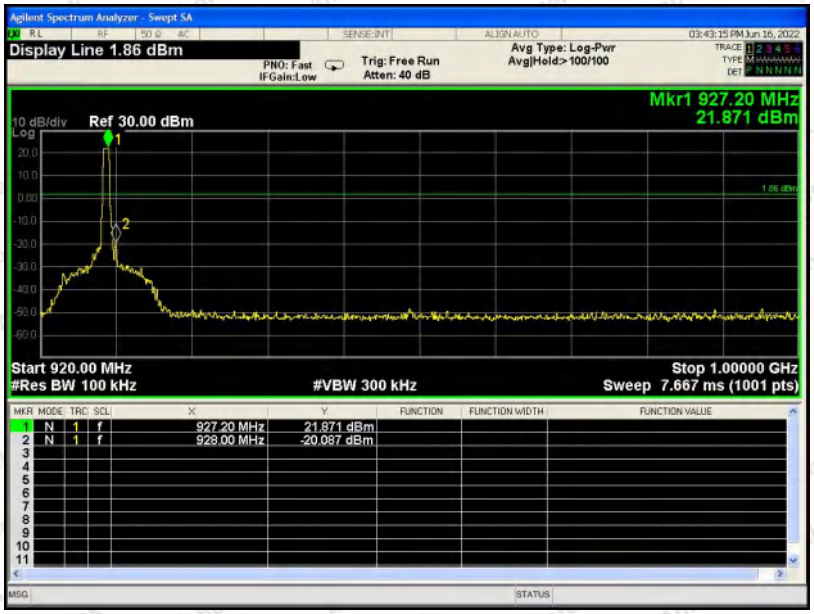
CH: Low



CH: High

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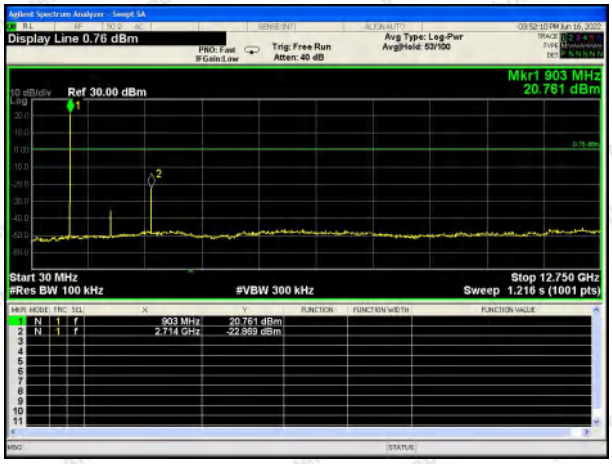
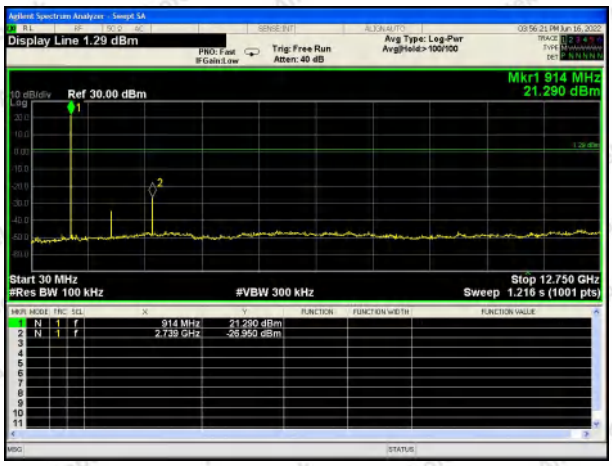
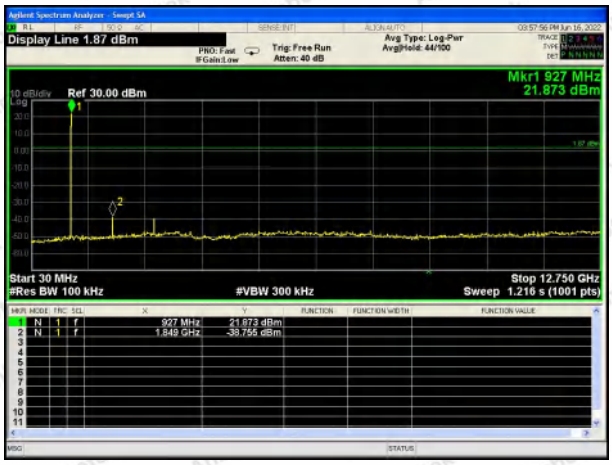
Conducted Emission Method



CH: Low



CH: Middle



CH: High

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9. Antenna Requirement

9.1. Test Standard and Requirement

Test Standard	FCC Part15 Section 15.203 /247(c)
Requirement	1) 15.203 requirement: 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, 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. 2) 15.247(c) (1)(i) requirement: Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna

9.2. Antenna Connected Construction

The antenna is a PCB antenna which permanently attached, and the best case gain of the antenna is 0.7 dBi. It complies with the standard requirement.

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APPENDIX I -- TEST SETUP PHOTOGRAPH

Photo of Conducted Emission Measurement

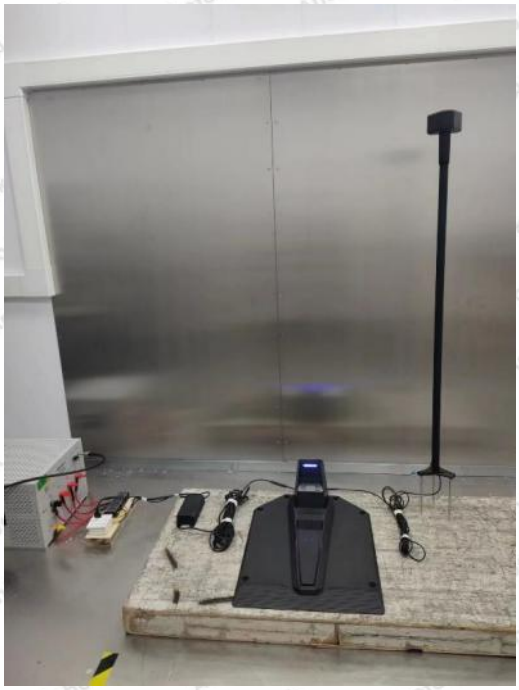
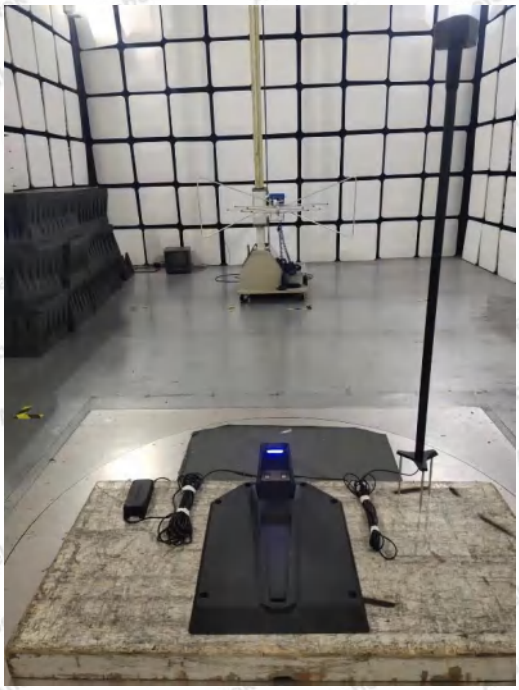


Photo of Radiation Emission Test



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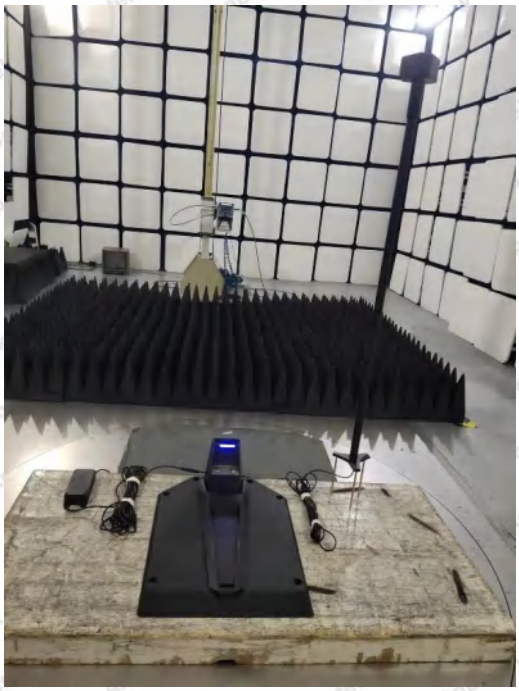

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APPENDIX II -- EXTERNAL PHOTOGRAPH

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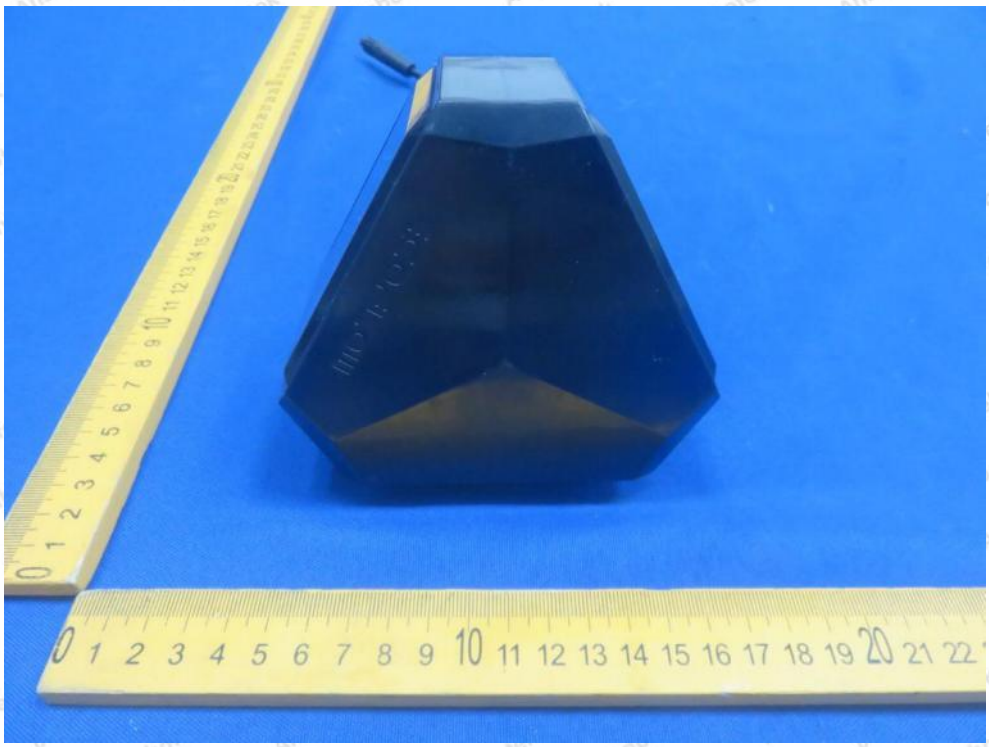

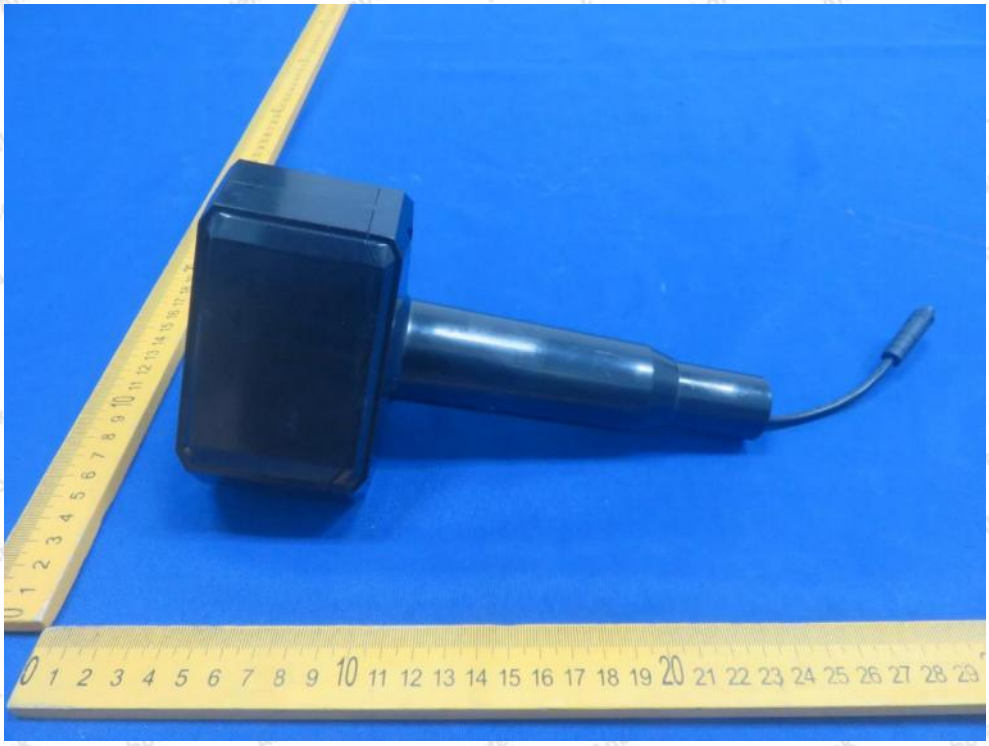

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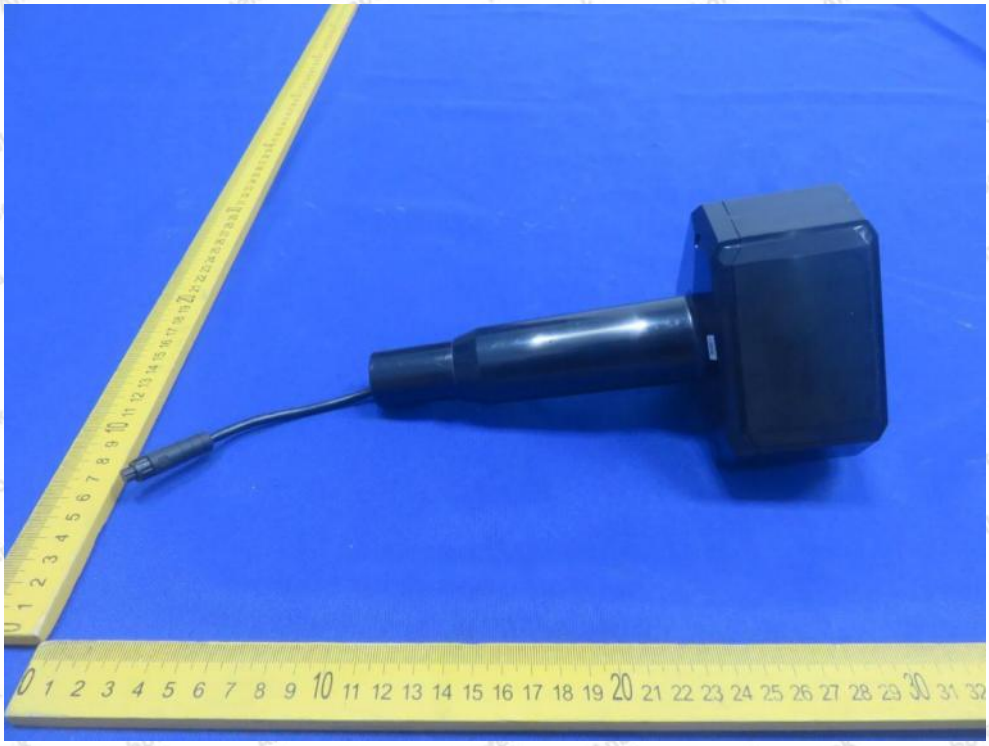

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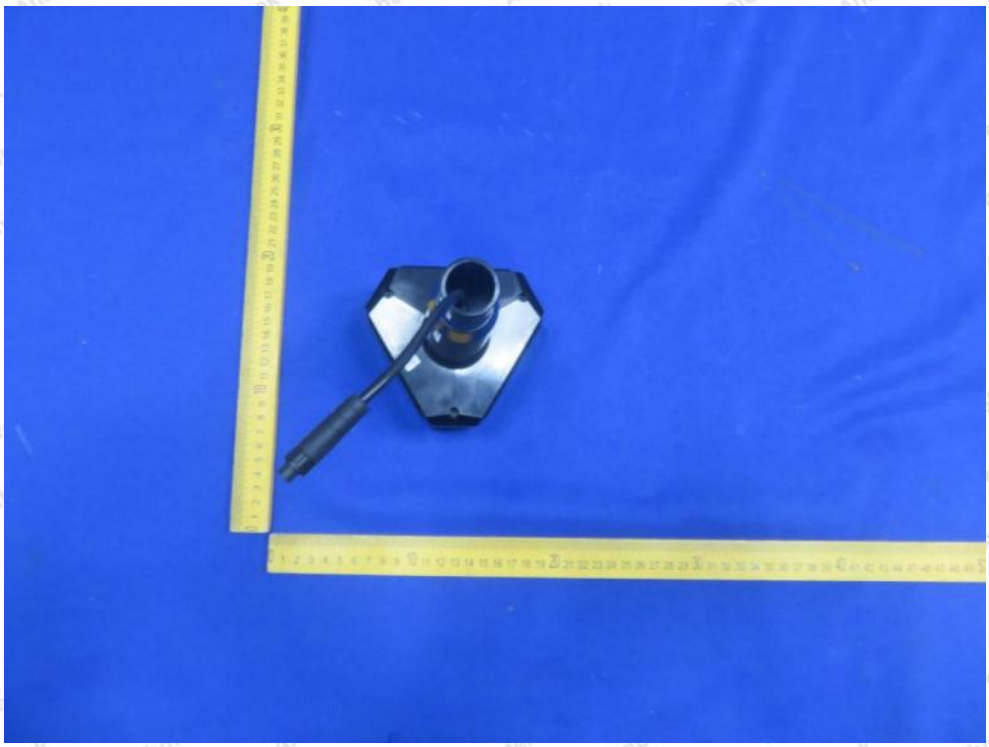

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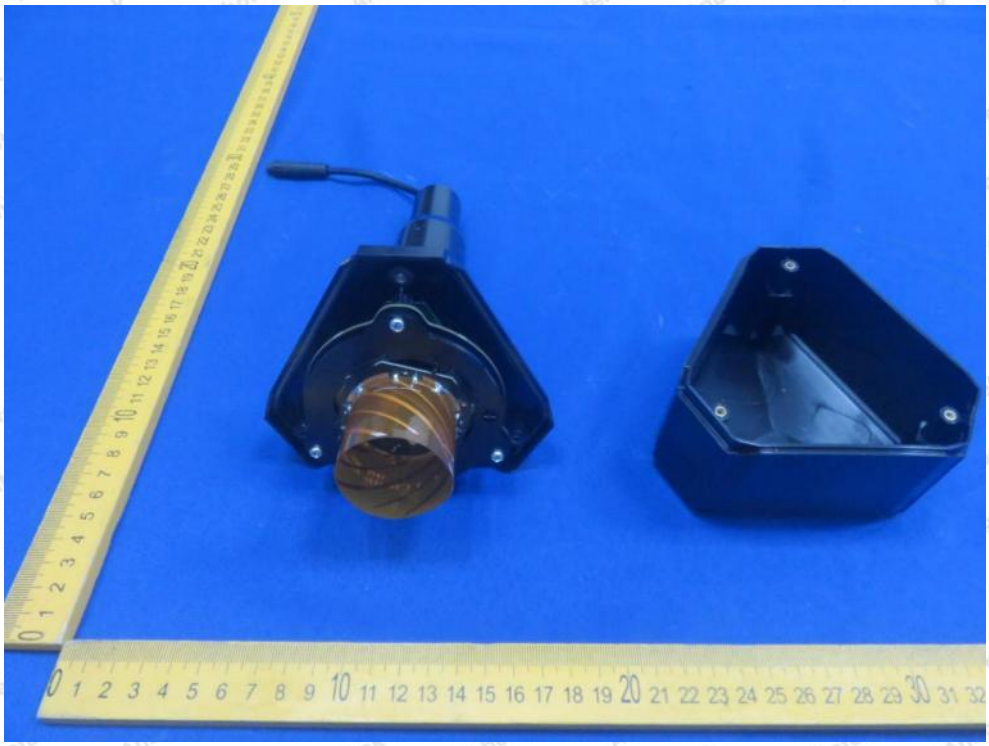
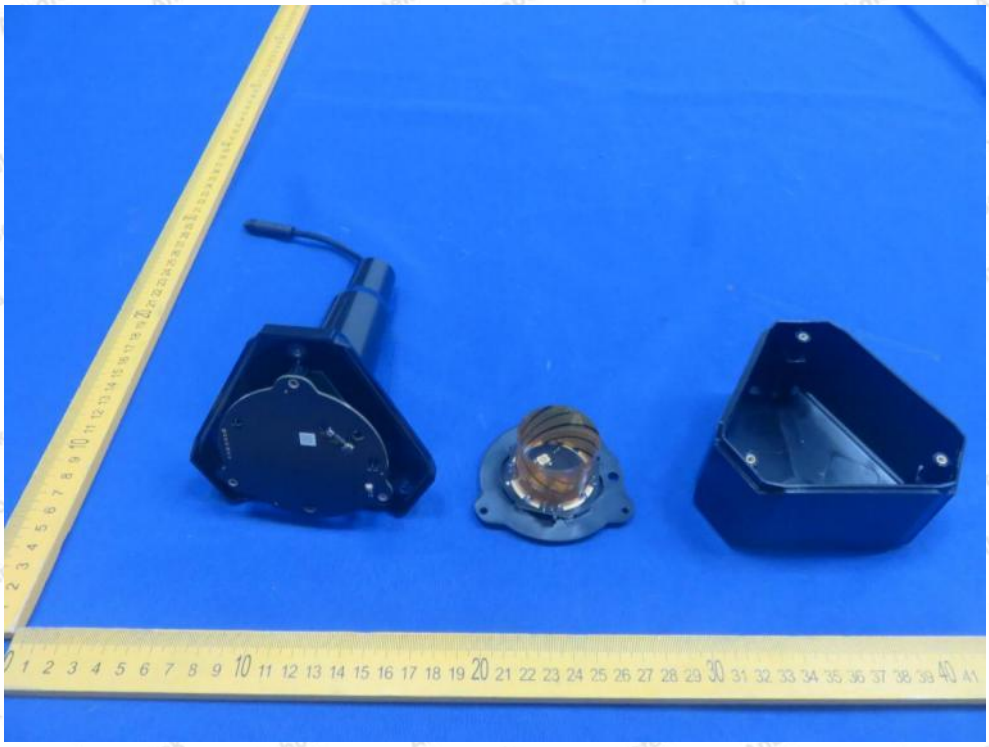
APPENDIX III -- INTERNAL PHOTOGRAPH





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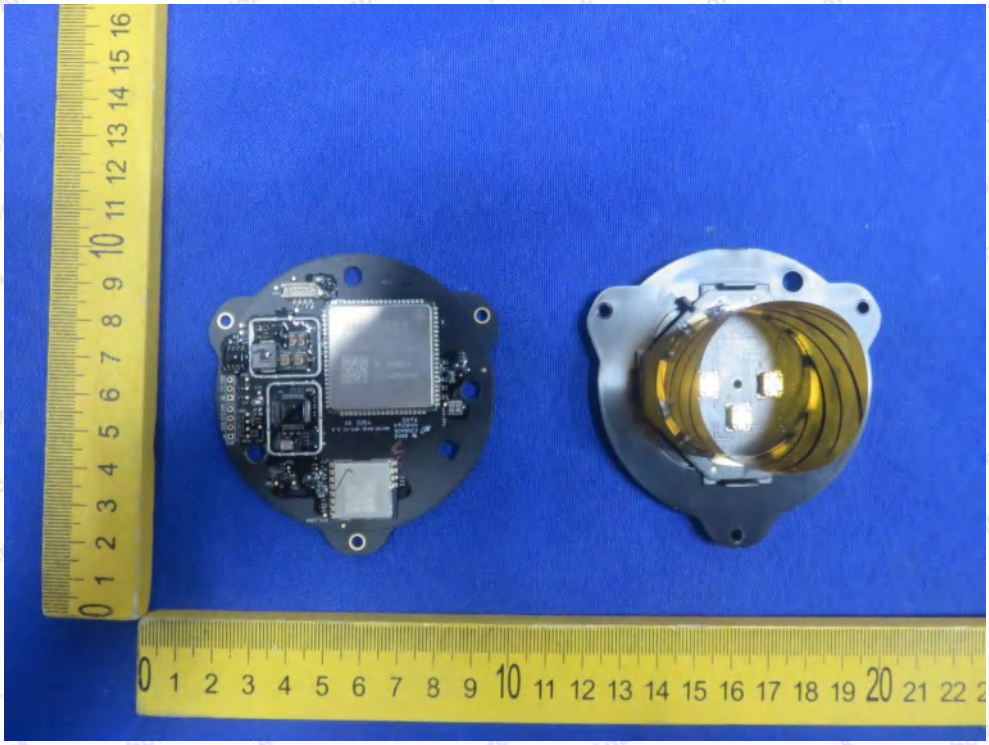

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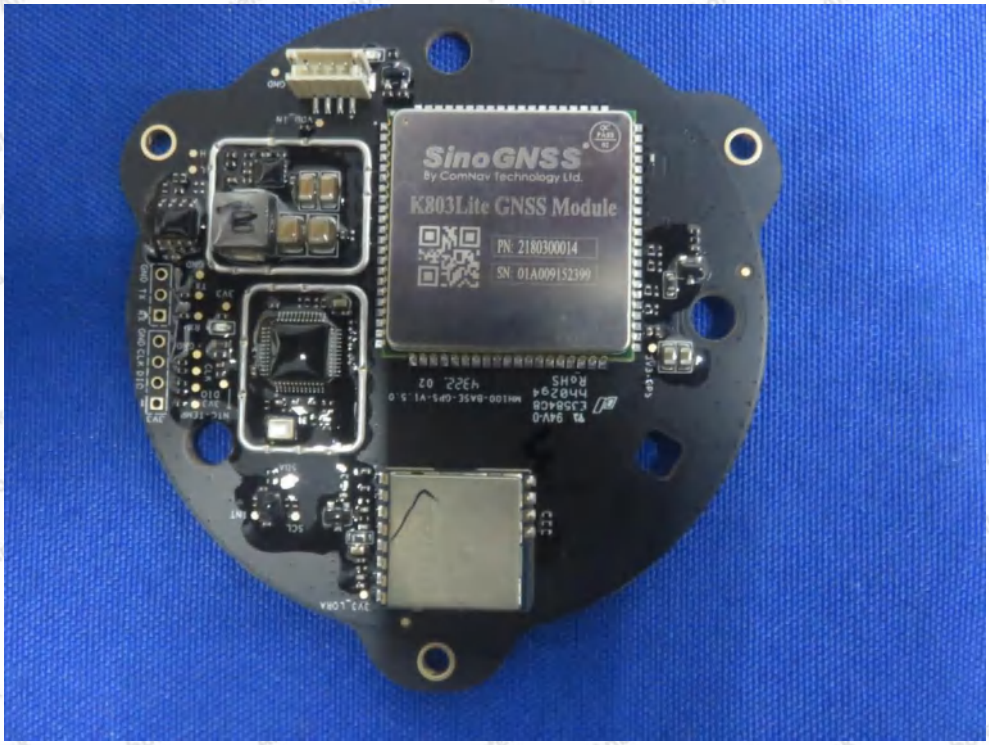

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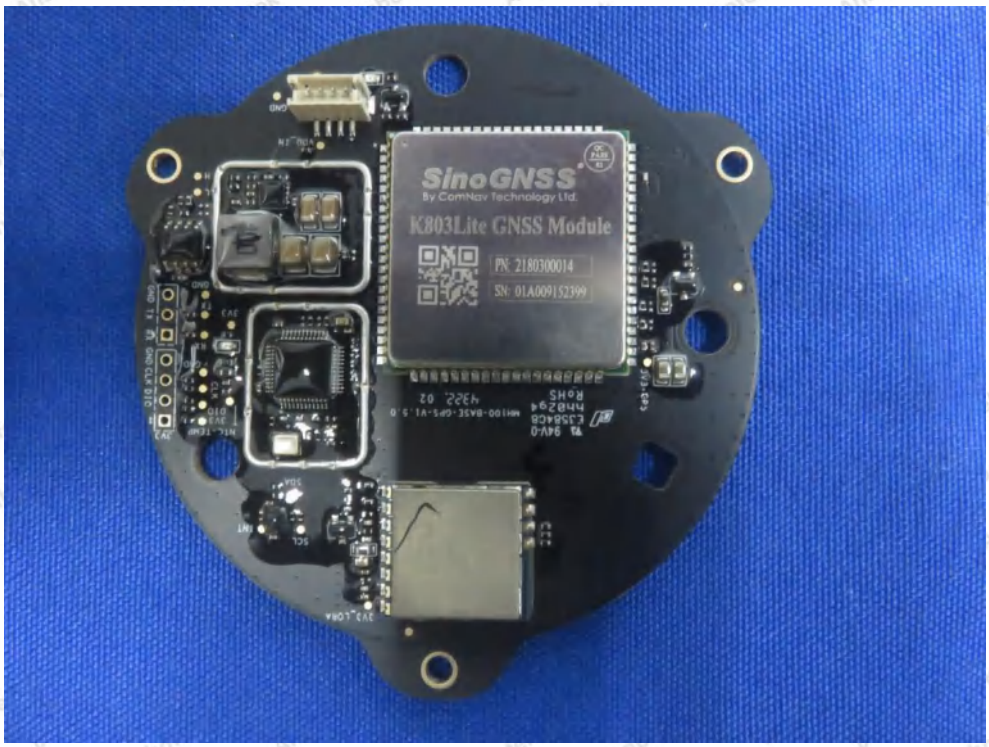

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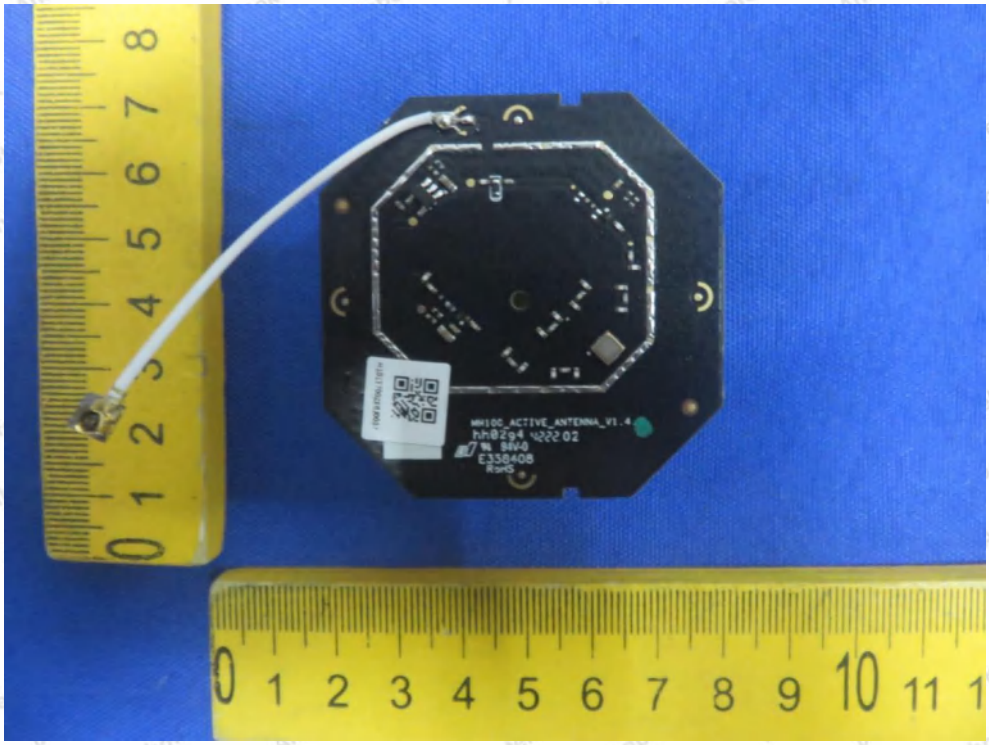

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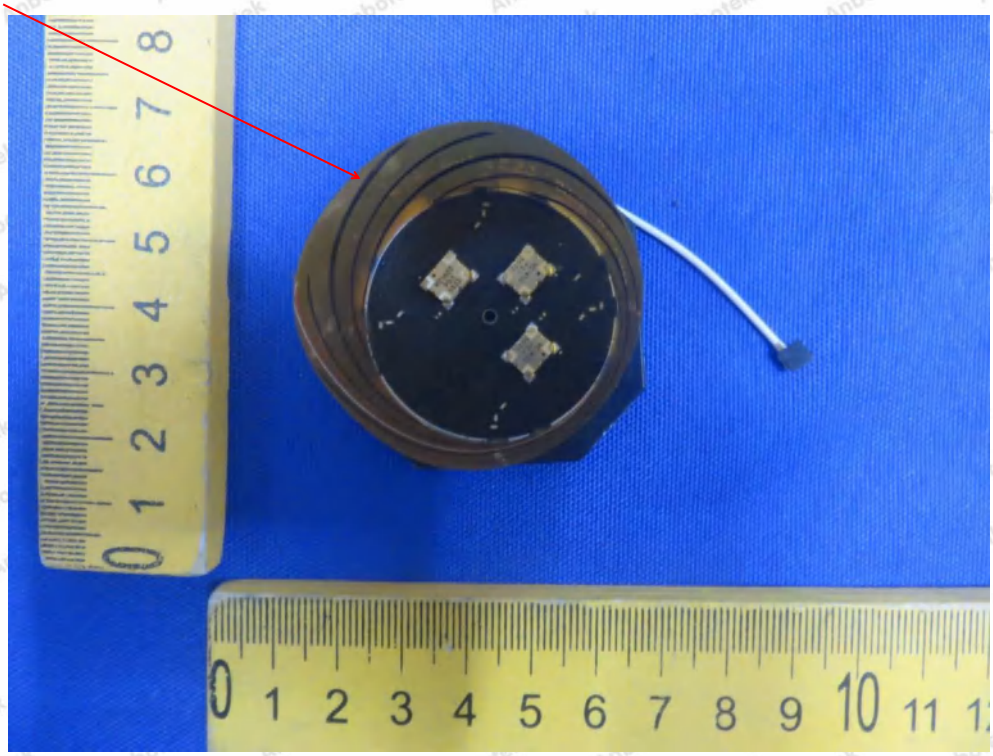

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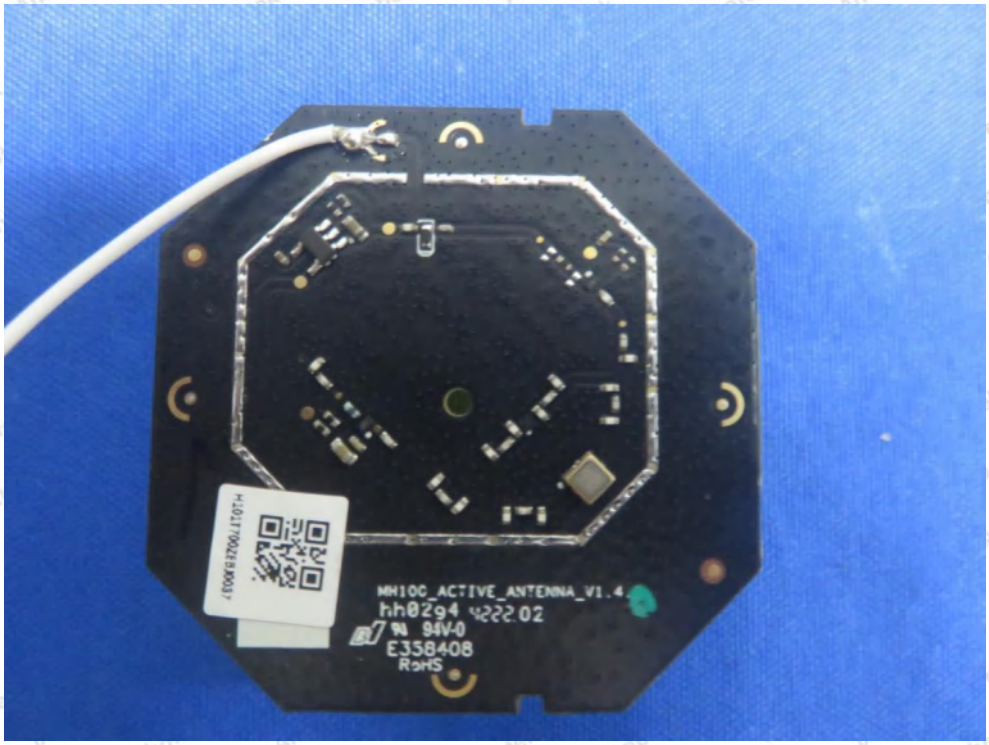

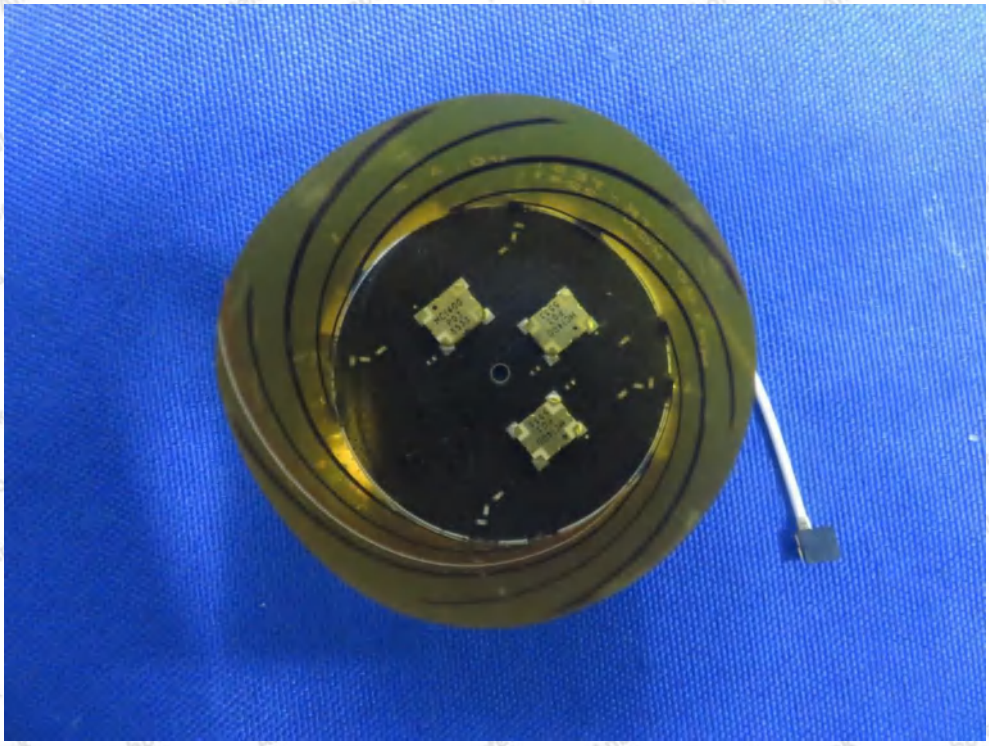

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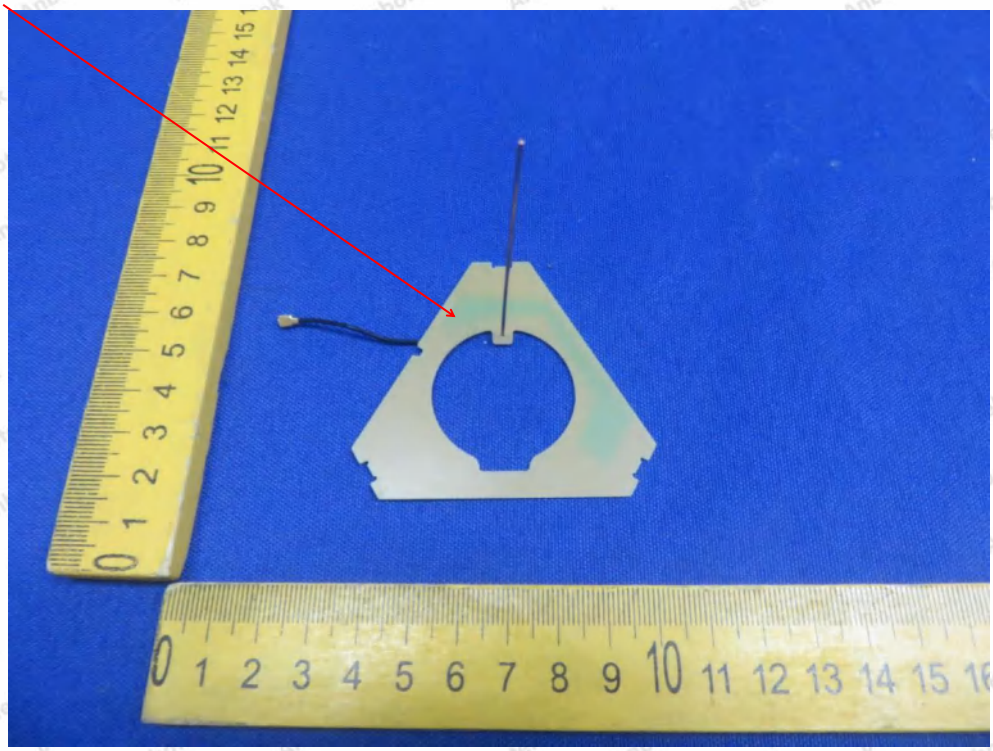

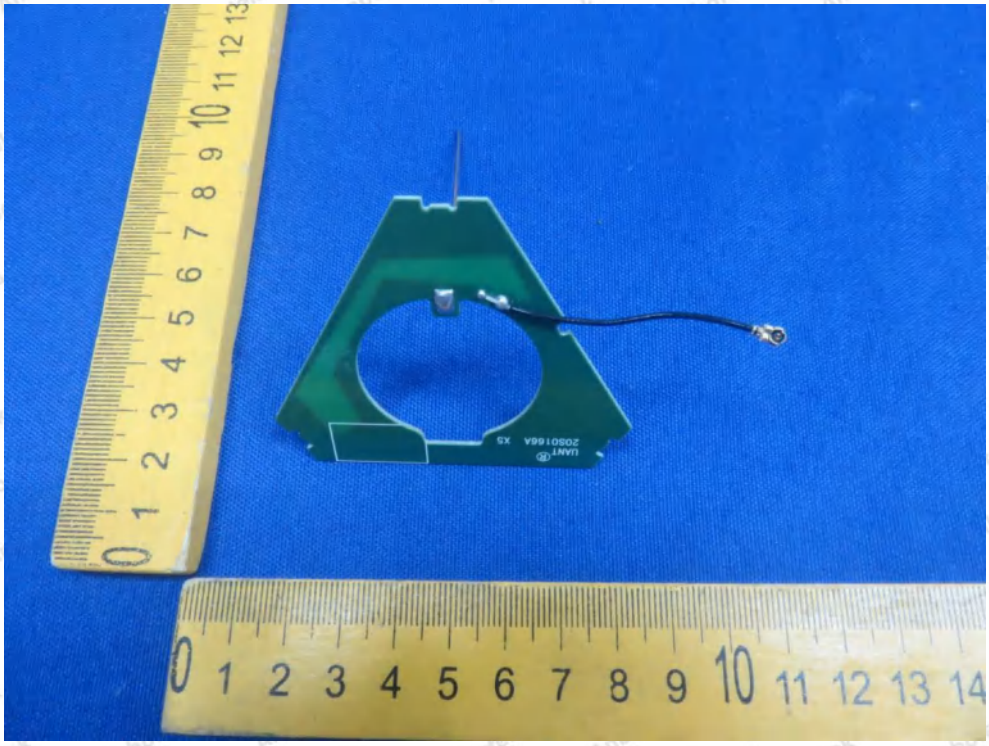

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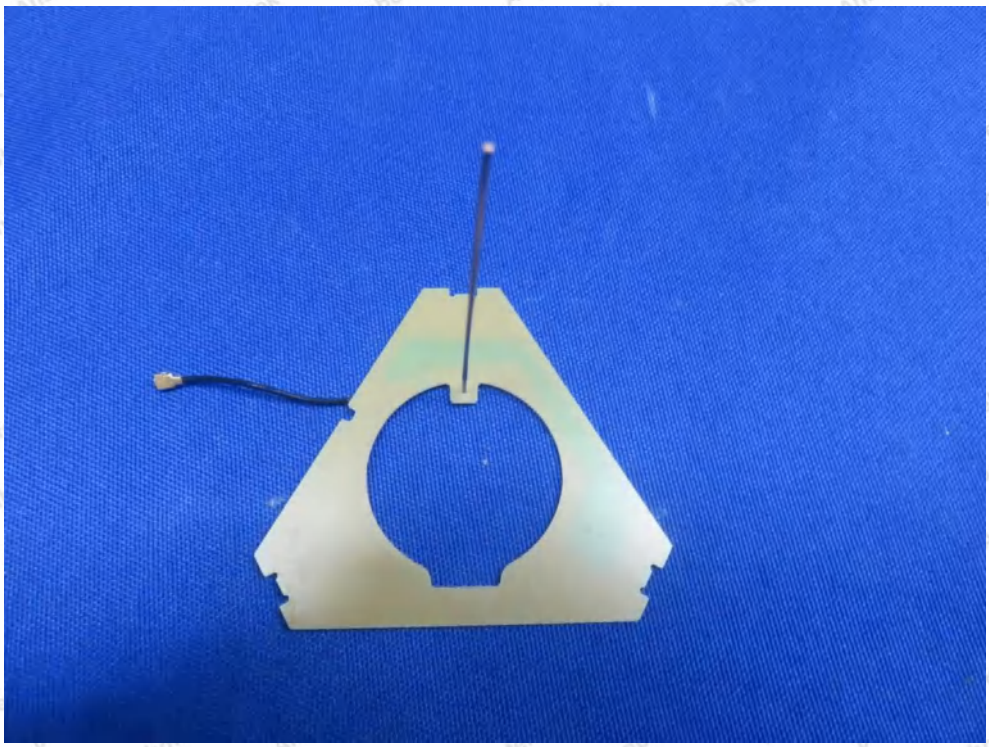

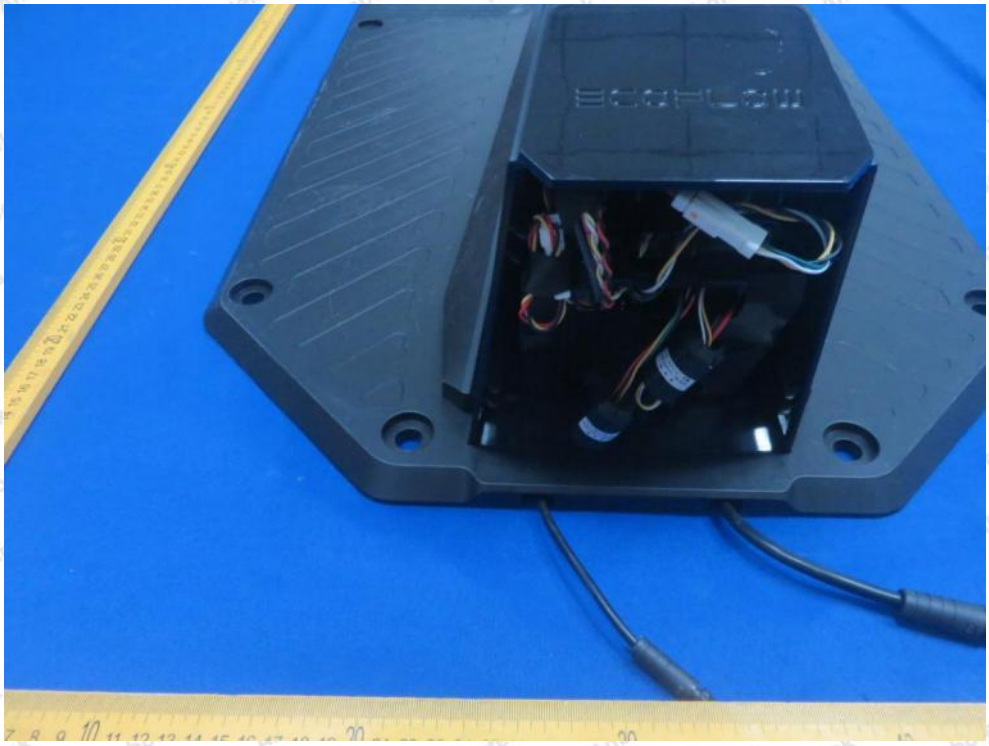

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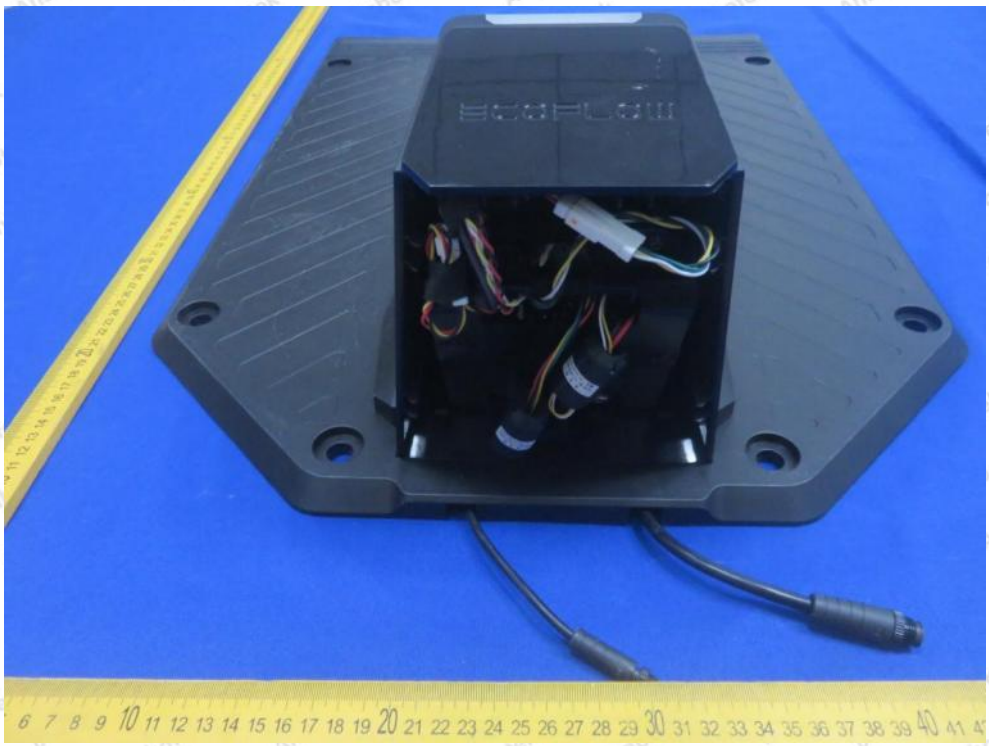

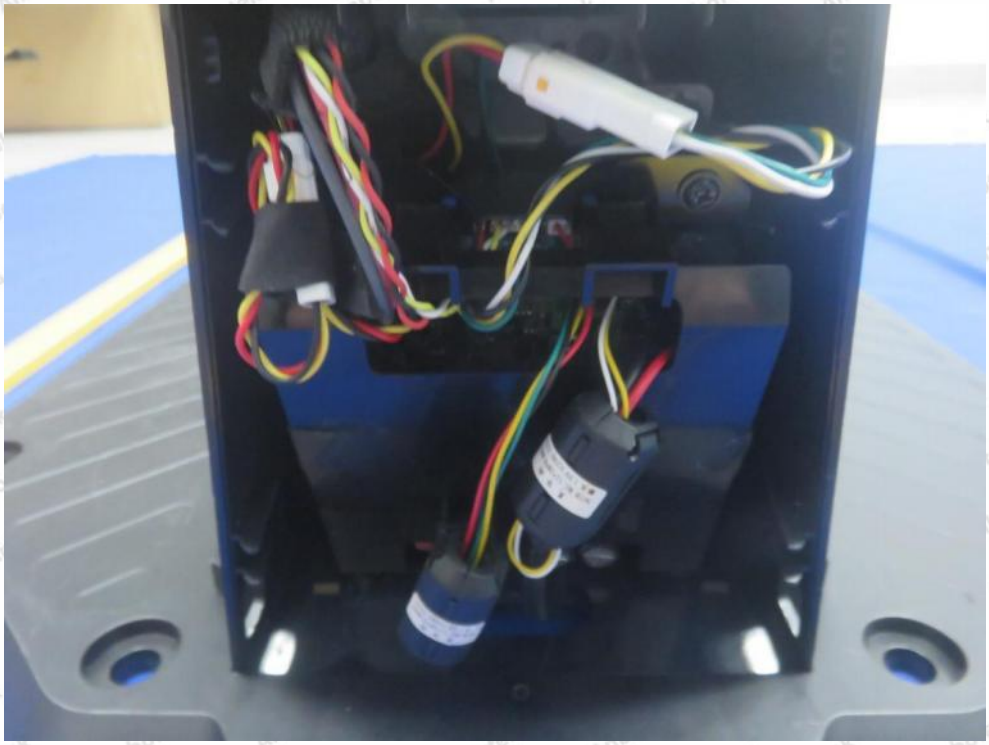

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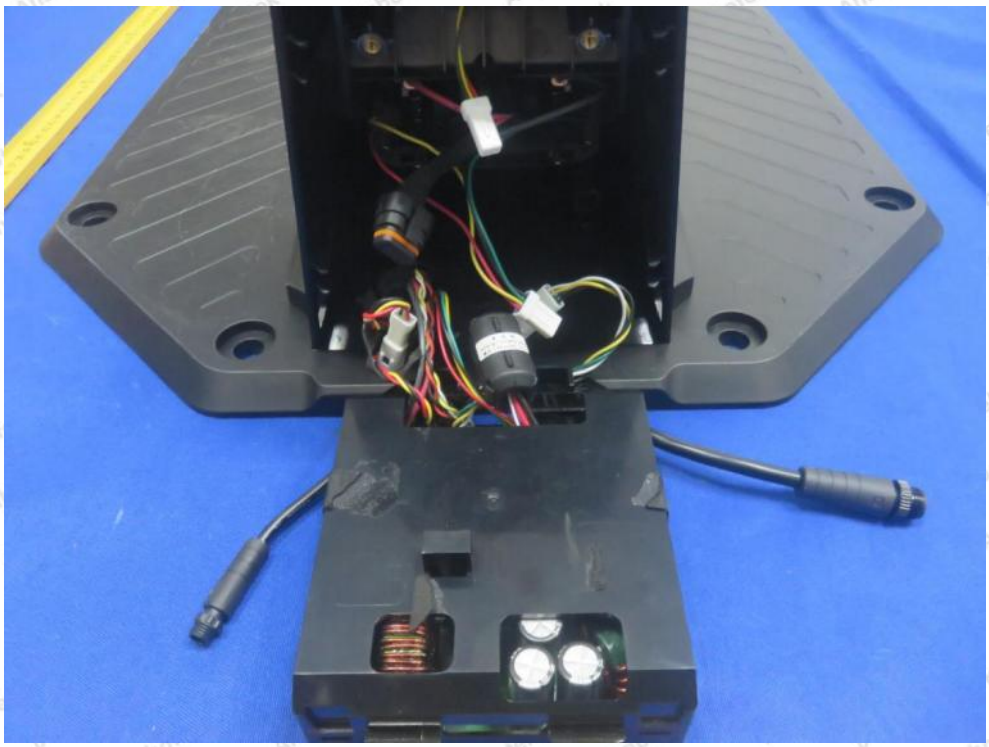

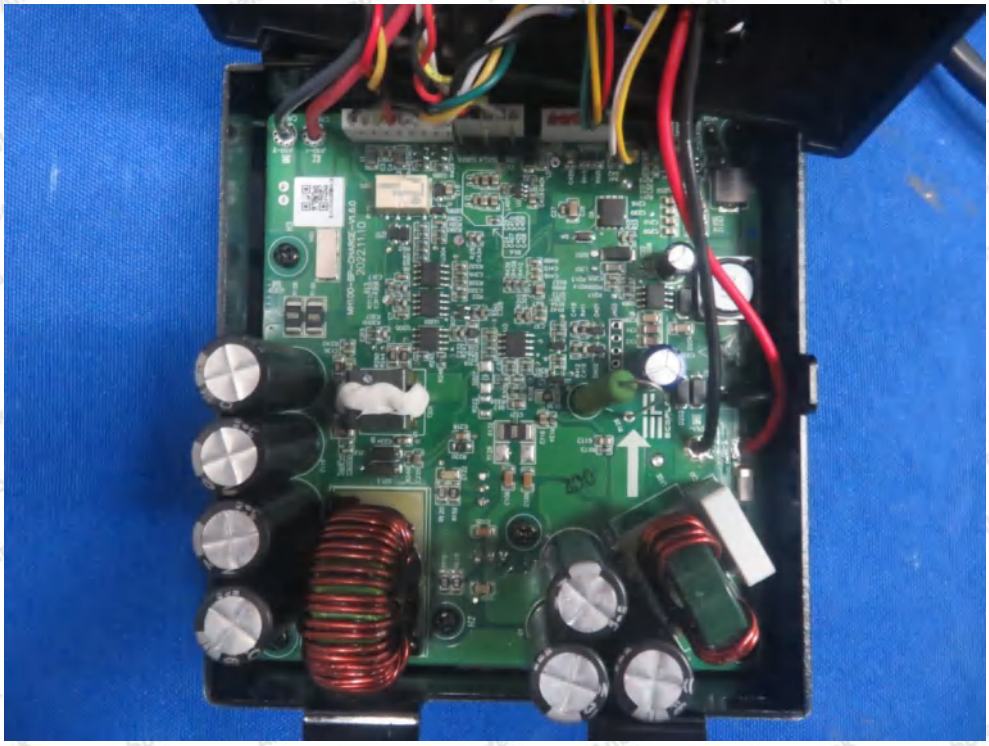

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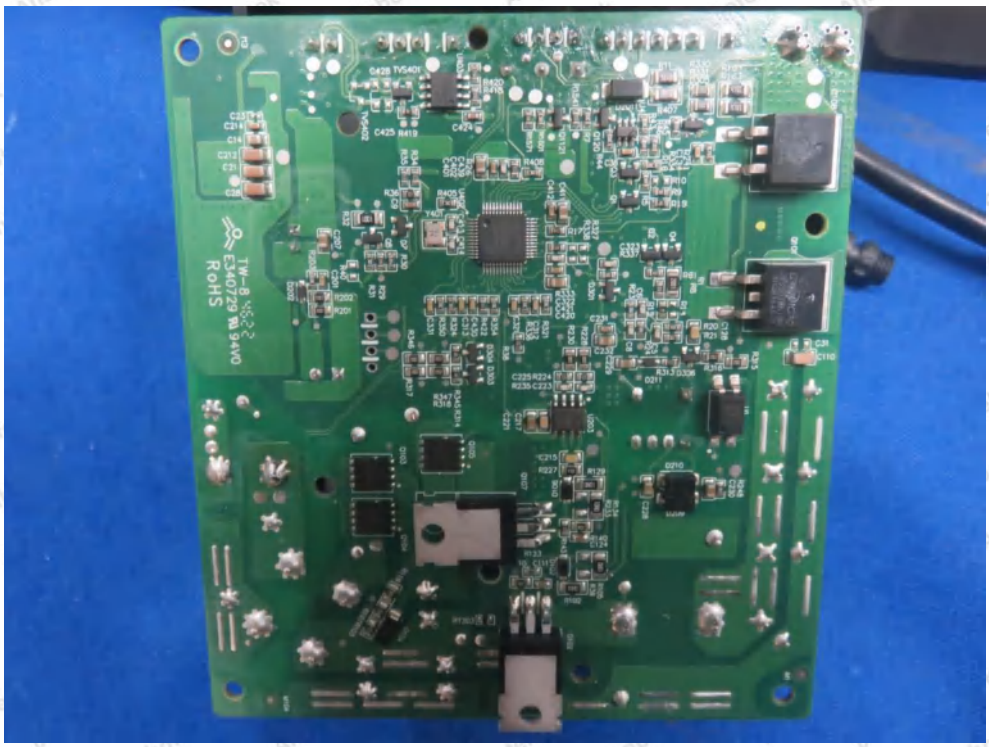

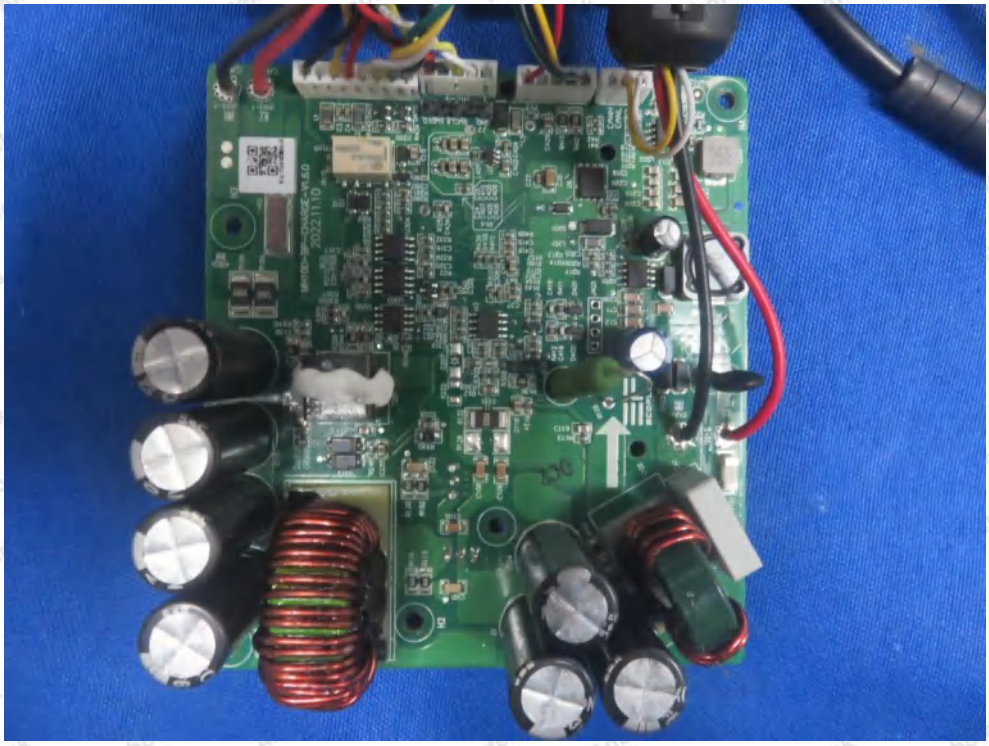

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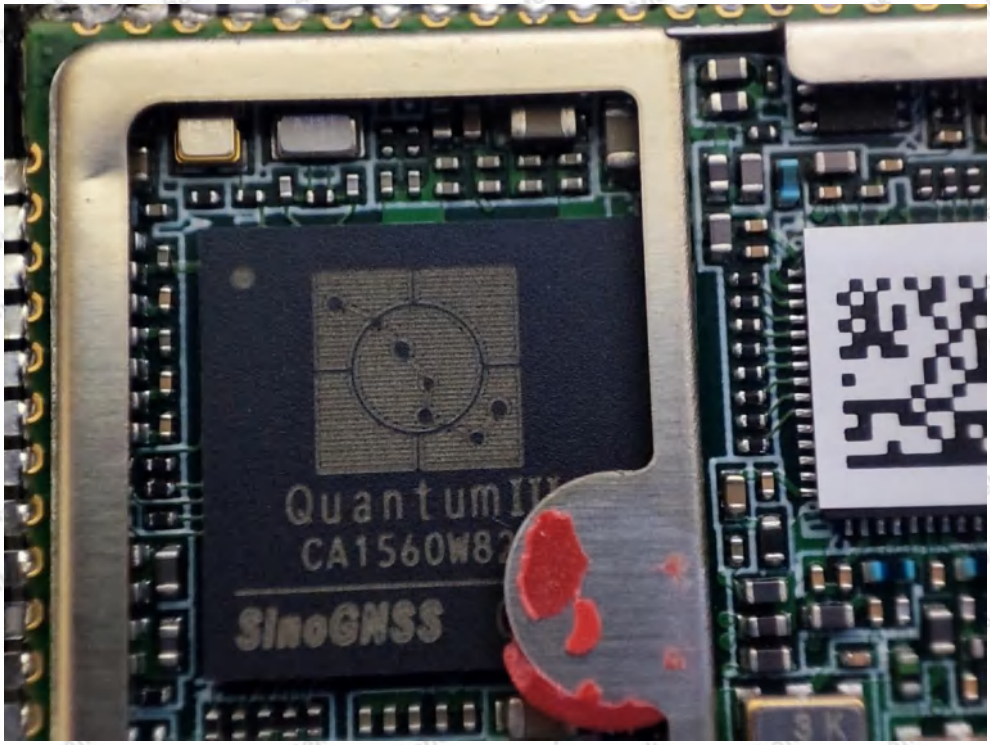

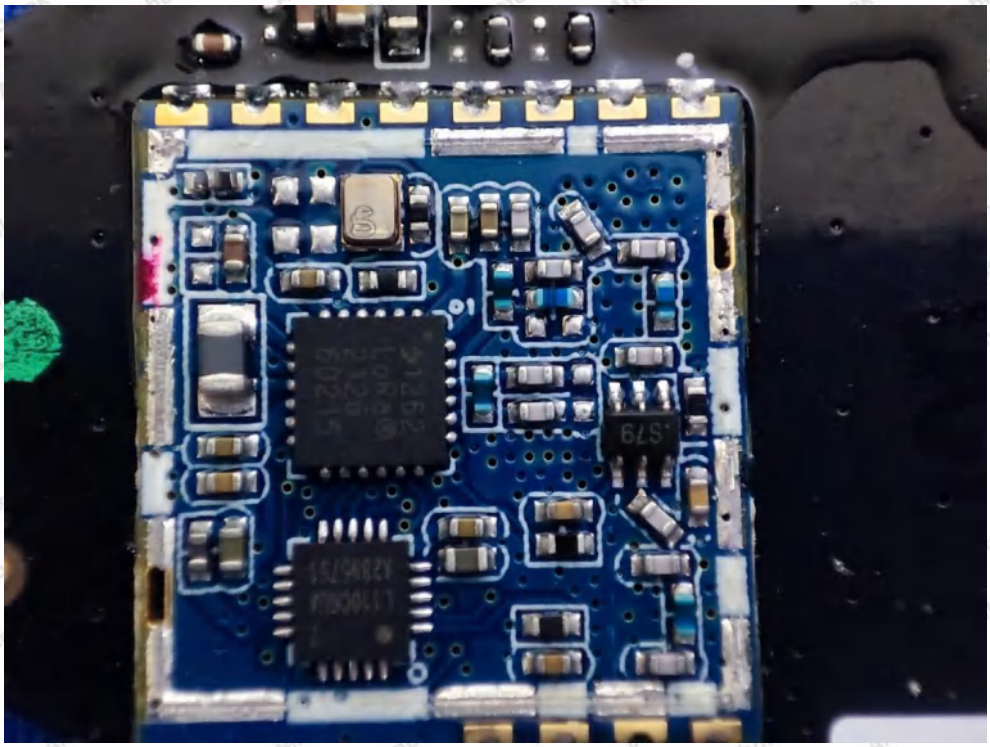

---------- End of Report ----------

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