

EUT	Smart Water Kettle	Model Name	QKY-BOIL-SLV
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with date rate 1 2437MHZ	Antenna	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4874.066	46.99	3.75	50.74	74.00	-23.26	peak
4874.066	42.72	3.75	46.47	54.00	-7.53	AVG
7311.099	40.75	8.16	48.91	74.00	-25.09	peak
7311.099	36.12	8.16	44.28	54.00	-9.72	AVG

Remark:

Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT	Smart Water Kettle	Model Name	QKY-BOIL-SLV
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with date rate 1 2437MHZ	Antenna	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4874.066	47.97	3.75	51.72	74.00	-22.28	peak
4874.066	44.86	3.75	48.61	54.00	-5.39	AVG
7311.099	41.01	8.16	49.17	74.00	-24.83	peak
7311.099	38.53	8.16	46.69	54.00	-7.31	AVG

Remark:

Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT	Smart Water Kettle	Model Name	QKY-BOIL-SLV
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with date rate 1 2462MHZ	Antenna	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4924.066	46.91	3.81	50.72	74.00	-23.28	peak
4924.066	43.80	3.81	47.61	54.00	-6.39	AVG
7386.099	38.47	8.19	46.66	74.00	-27.34	peak
7386.099	36.63	8.19	44.82	54.00	-9.18	AVG

Remark:

Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT	Smart Water Kettle	Model Name	QKY-BOIL-SLV
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with date rate 1 2462MHZ	Antenna	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4924.066	46.91	3.81	50.72	74.00	-23.28	peak
4924.066	44.80	3.81	48.61	54.00	-5.39	AVG
7386.099	38.87	8.19	47.06	74.00	-26.94	peak
7386.099	37.36	8.19	45.55	54.00	-8.45	AVG

Remark:

Factor = Antenna Factor + Cable Loss – Pre-amplifier.

RESULT: PASS

Note:

Other emissions from 1G to 25 GHz are considered as ambient noise. No recording in the test report.

Factor = Antenna Factor + Cable loss - Amplifier gain, Over=Measure-Limit.

The "Factor" value can be calculated automatically by software of measurement system.

All test modes had been pre-tested. The 802.11b mode is the worst case and recorded in the report.

12. BAND EDGE EMISSION

12.1. MEASUREMENT PROCEDURE

Radiated restricted band edge measurements

The radiated restricted band edge measurements are measured with an EMI test receiver connected to the receive antenna while the EUT is transmitting

12.2. TEST SET-UP

same as 11.2

Note:

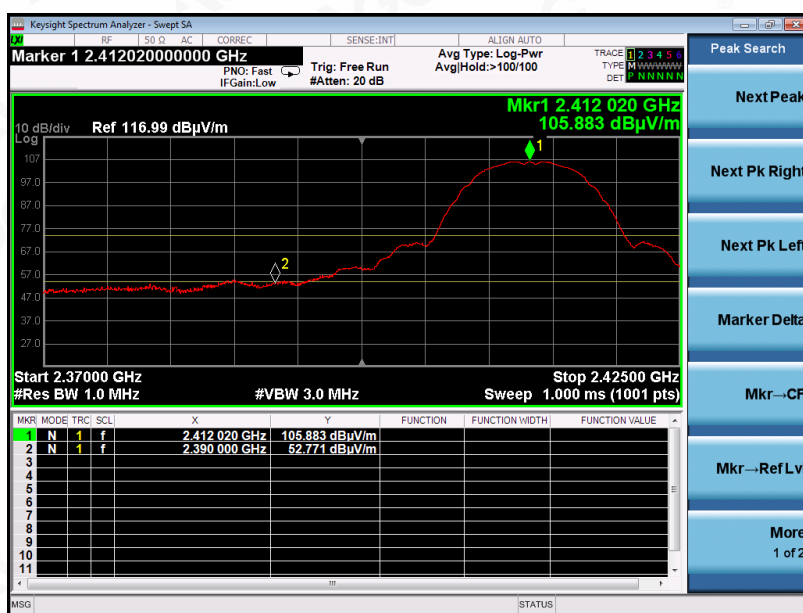
1. Factor=Antenna Factor + Cable loss - Amplifier gain. Field Strength=Factor + Reading level
2. The factor had been edited in the "Input Correction" of the Spectrum Analyzer. So the Amplitude of test plots is equal to Reading level plus the Factor in dB. Use the A dB(μ V) to represent the Amplitude. Use the F dB(μ V/m) to represent the Field Strength. So A=F.



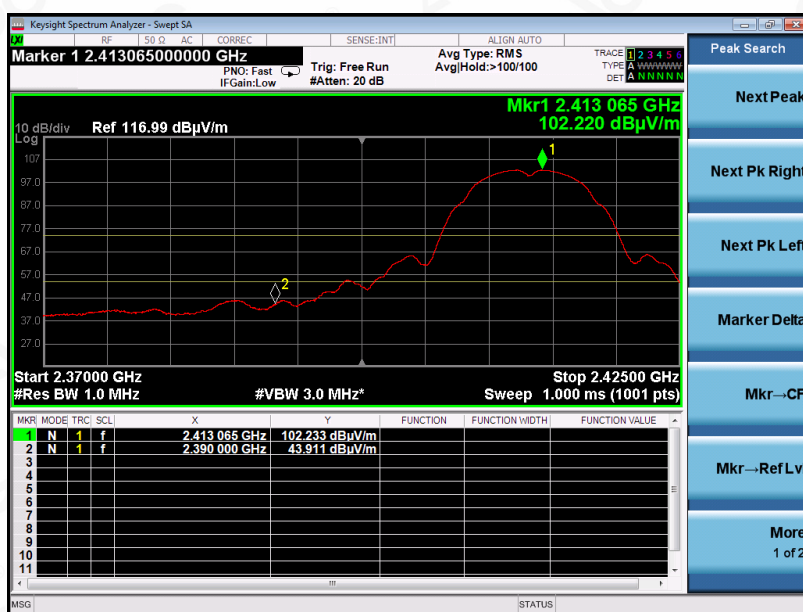
12.3. TEST RESULT

EUT	Smart Water Kettle	Model Name	QKY-BOIL-SLV
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with data rate 1 2412MHZ	Antenna	Horizontal

PK



AV



RESULT: PASS

EUT	Smart Water Kettle	Model Name	QKY-BOIL-SLV
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with data rate 1 2412MHZ	Antenna	Vertical

PK



AV



RESULT: PASS

EUT	Smart Water Kettle	Model Name	QKY-BOIL-SLV
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with data rate 1 2462MHZ	Antenna	Horizontal

PK



AV



RESULT: PASS

EUT	Smart Water Kettle	Model Name	QKY-BOIL-SLV
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11b with data rate 1 2462MHZ	Antenna	Vertical

PK



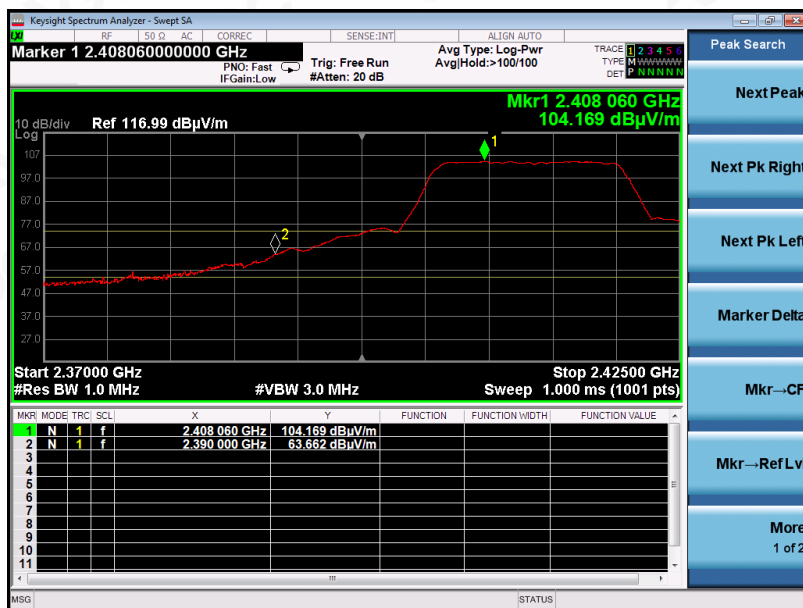
AV



RESULT: PASS

EUT	Smart Water Kettle	Model Name	QKY-BOIL-SLV
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11g with data rate 6 2412MHZ	Antenna	Horizontal

PK



AV



RESULT: PASS

EUT	Smart Water Kettle	Model Name	QKY-BOIL-SLV
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11g with data rate 6 2412MHZ	Antenna	Vertical

PK



AV



RESULT: PASS

EUT	Smart Water Kettle	Model Name	QKY-BOIL-SLV
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11g with data rate 6 2462MHZ	Antenna	Horizontal

PK



AV



RESULT: PASS

EUT	Smart Water Kettle	Model Name	QKY-BOIL-SLV
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11g with data rate 6 2462MHZ	Antenna	Vertical

PK



AV



RESULT: PASS

EUT	Smart Water Kettle	Model Name	QKY-BOIL-SLV
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n 20 with data rate 6.5 2412MHZ	Antenna	Horizontal

PK



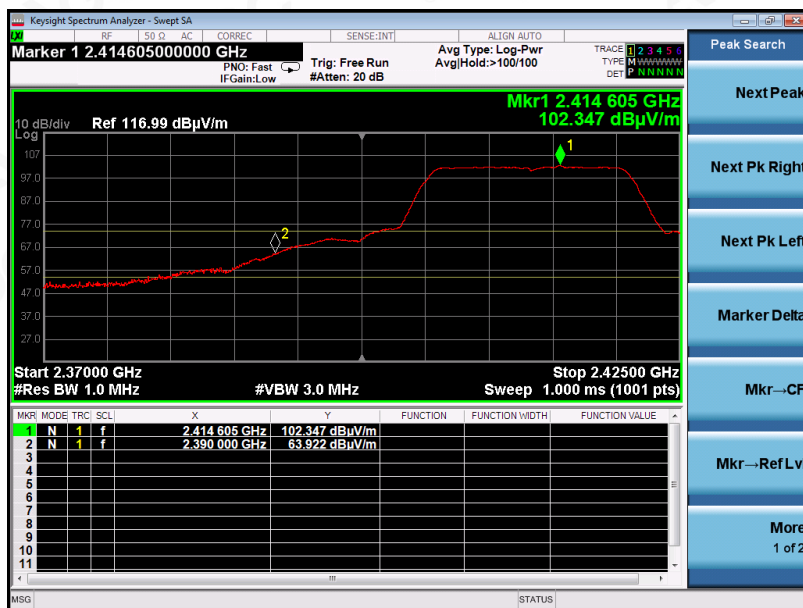
AV



RESULT: PASS

EUT	Smart Water Kettle	Model Name	QKY-BOIL-SLV
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n 20 with data rate 6.5 2412MHZ	Antenna	Vertical

PK



AV



RESULT: PASS

EUT	Smart Water Kettle	Model Name	QKY-BOIL-SLV
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n 20 with data rate 6.5 2462MHZ	Antenna	Horizontal

PK



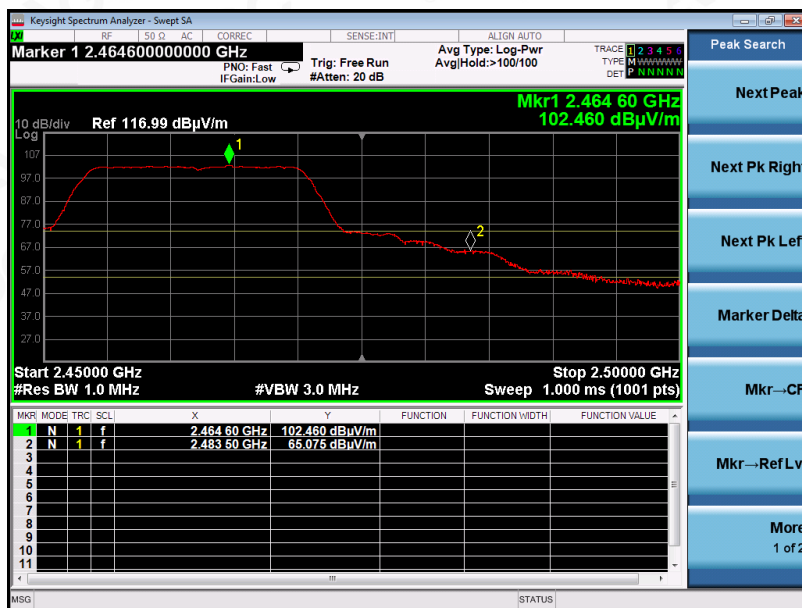
AV



RESULT: PASS

EUT	Smart Water Kettle	Model Name	QKY-BOIL-SLV
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n 20 with data rate 6.5 2462MHZ	Antenna	Vertical

PK



AV



RESULT: PASS

13. FCC LINE CONDUCTED EMISSION TEST

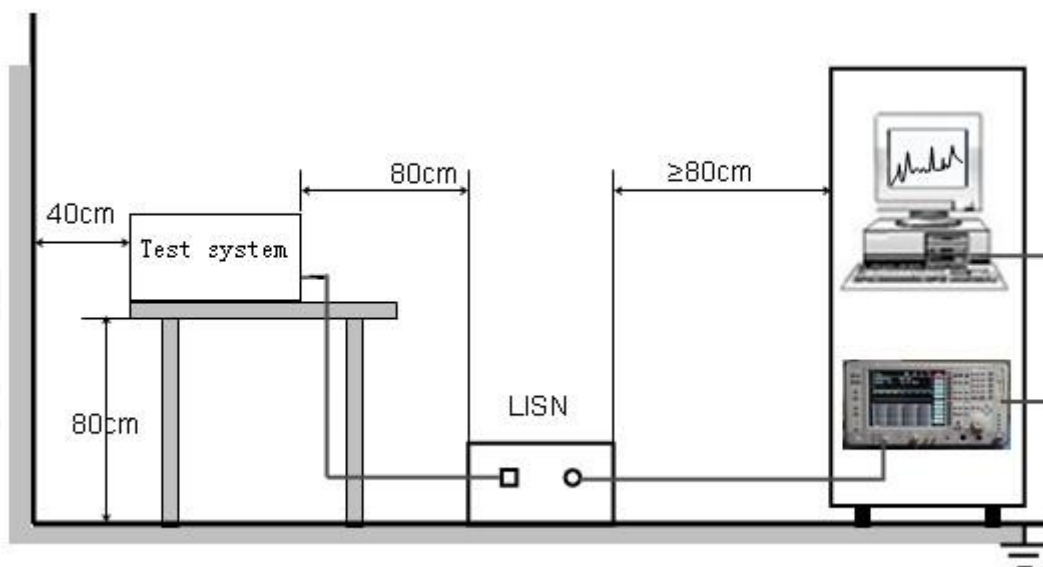
13.1. LIMITS OF LINE CONDUCTED EMISSION TEST

Frequency	Maximum RF Line Voltage	
	Q.P.(dBuV)	Average(dBuV)
150kHz-500kHz	66-56	56-46
500kHz-5MHz	56	46
5MHz-30MHz	60	50

Note:

1. The lower limit shall apply at the transition frequency.
2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50MHz.

13.2. BLOCK DIAGRAM OF TEST SETUP



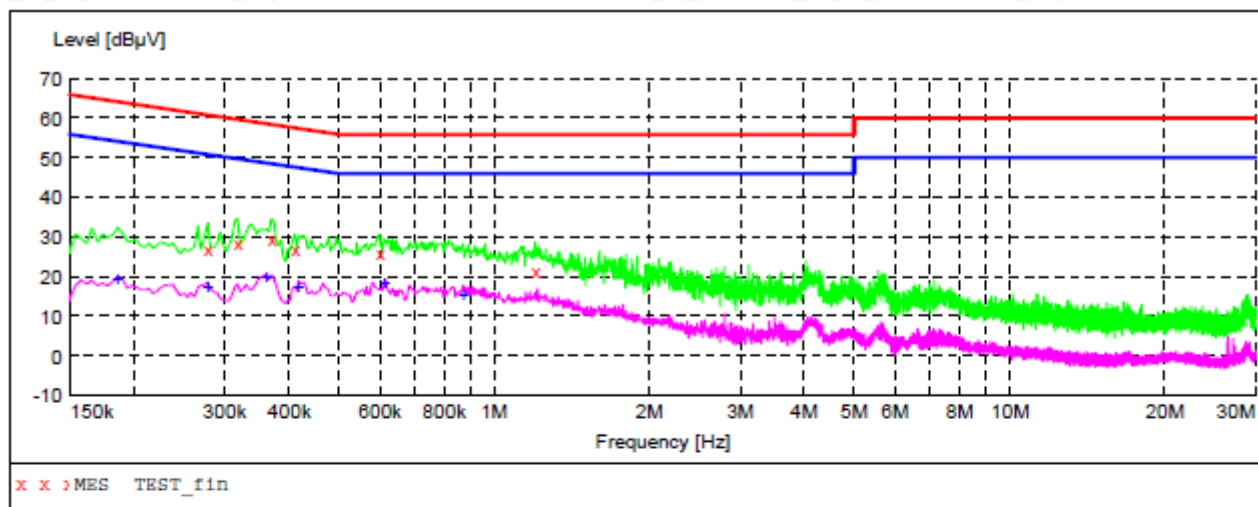
13.3. PROCEDURE OF LINE CONDUCTED EMISSION TEST

- (1) The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.10 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- (2) Support equipment, if needed, was placed as per ANSI C63.10.
- (3) All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.
- (4) The EUT received DC 5V power from adapter which received AC120V/60Hz power by a LISN.
- (5) The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
- (6) Analyzer / Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.
- (7) During the above scans, the emissions were maximized by cable manipulation.
- (8) A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions.
- (9) Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. If EUT emission level was less -2dB to the A.V. limit in Peak mode, then the emission signal was re-checked using Q.P and Average detector.



13.4. TEST RESULT OF LINE CONDUCTED EMISSION TEST

LINE CONDUCTED EMISSION TEST-L1



MEASUREMENT RESULT: "TEST_fin"

9/10/2019 7:37PM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.278000	27.20	10.9	61	33.7	QP	L1	FLO
0.318000	28.60	10.8	60	31.2	QP	L1	FLO
0.370000	29.80	10.5	59	28.7	QP	L1	FLO
0.410000	27.20	10.4	58	30.4	QP	L1	FLO
0.598000	26.30	10.7	56	29.7	QP	L1	FLO
1.202000	21.40	11.5	56	34.6	QP	L1	FLO

MEASUREMENT RESULT: "TEST_fin2"

9/10/2019 7:37PM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.186000	19.30	10.9	54	34.9	AV	L1	FLO
0.278000	17.50	10.9	51	33.4	AV	L1	FLO
0.362000	20.00	10.5	49	28.7	AV	L1	FLO
0.418000	17.60	10.5	48	29.9	AV	L1	FLO
0.614000	18.50	10.7	46	27.5	AV	L1	FLO
0.870000	15.50	11.0	46	30.5	AV	L1	FLO

RESULT: PASS



Attestation of Global Compliance

Attestation of Global Compliance(Shenzhen)Co.,Ltd.

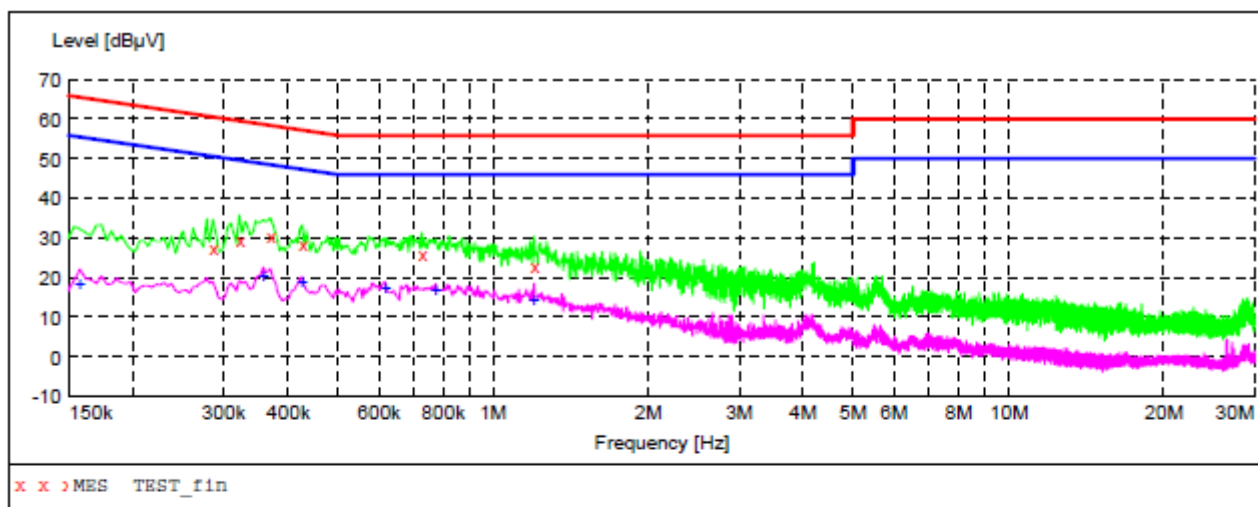
Add: 2/F., Building 2, Sanwei Chaxi Industrial Park, Sanwei Community,
Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline: 400 089 2118

LINE CONDUCTED EMISSION TEST-N



MEASUREMENT RESULT: "TEST_fin"

9/10/2019 7:34PM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.286000	27.60	10.9	61	33.0	QP	N	FLO
0.322000	29.80	10.8	60	29.9	QP	N	FLO
0.370000	30.80	10.5	59	27.7	QP	N	FLO
0.426000	28.40	10.6	57	28.9	QP	N	FLO
0.726000	26.30	10.5	56	29.7	QP	N	FLO
1.202000	23.00	11.5	56	33.0	QP	N	FLO

MEASUREMENT RESULT: "TEST_fin2"

9/10/2019 7:34PM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.158000	18.30	10.8	56	37.3	AV	N	FLO
0.358000	20.50	10.5	49	28.3	AV	N	FLO
0.426000	18.80	10.6	47	28.5	AV	N	FLO
0.618000	17.60	10.7	46	28.4	AV	N	FLO
0.774000	17.10	10.6	46	28.9	AV	N	FLO
1.202000	14.40	11.5	46	31.6	AV	N	FLO



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Add: 2/F., Building 2, Sanwei Chaxi Industrial Park, Sanwei Community,
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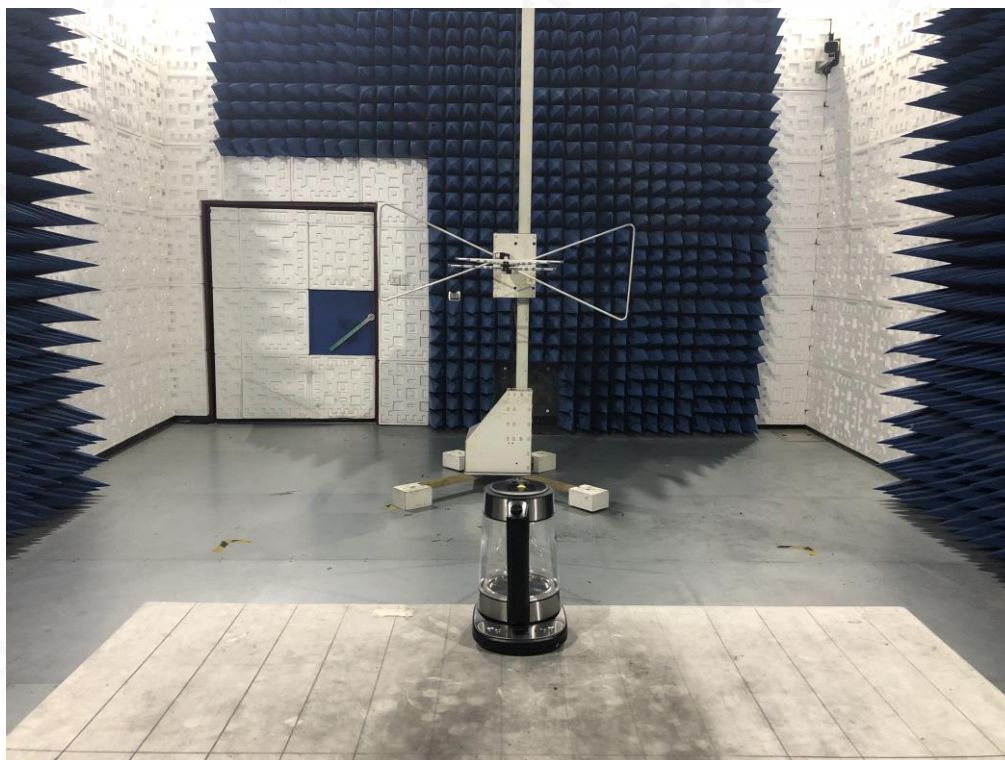
Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline: 400 089 2118

APPENDIX A: PHOTOGRAPHS OF TEST SETUP

FCC RADIATED EMISSION TEST SETUP BELOW 1GHZ



FCC RADIATED EMISSION TEST SETUP ABOVE 1GHZ



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Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China

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E-mail: agc@agc-cert.com

Service Hotline:400 089 2118

FCC CONDUCTED EMISSION TEST SETUP

APPENDIX B: PHOTOGRAPHS OF EUT

ALL VIEW OF EUT





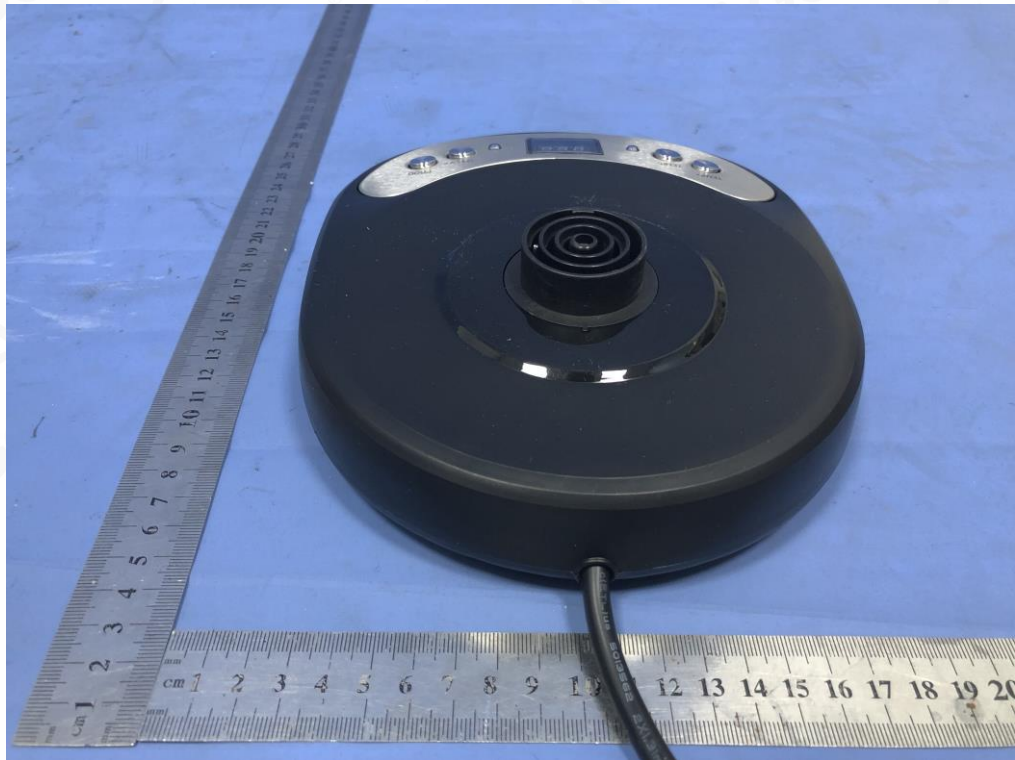
TOP VIEW OF EUT



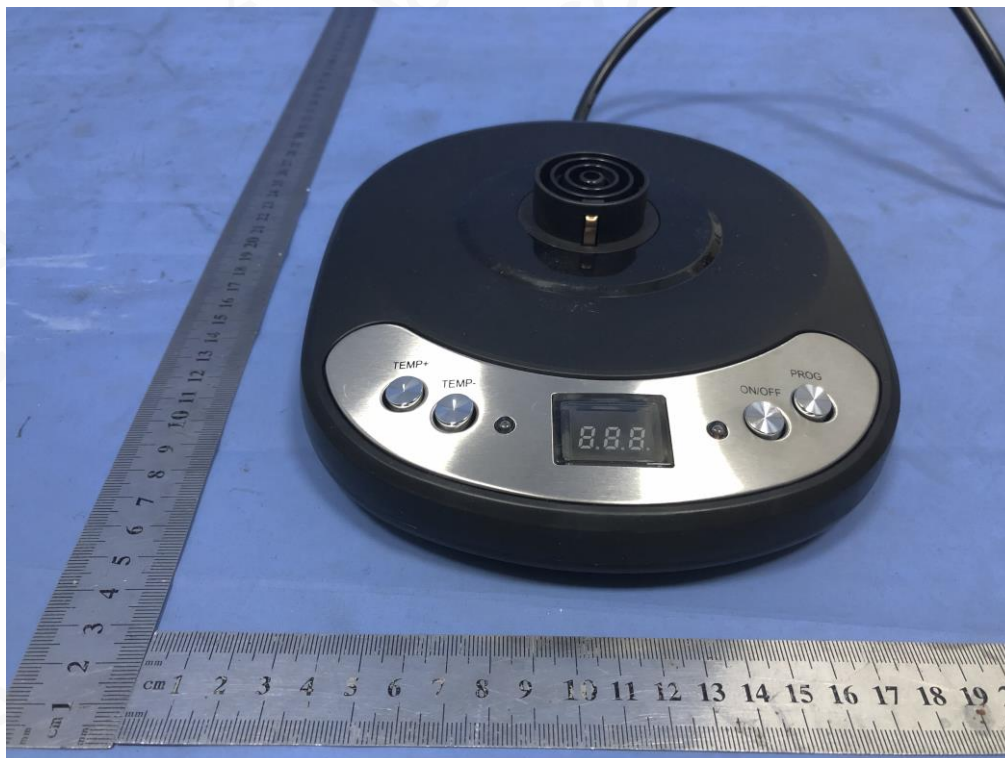
BOTTOM VIEW OF EUT



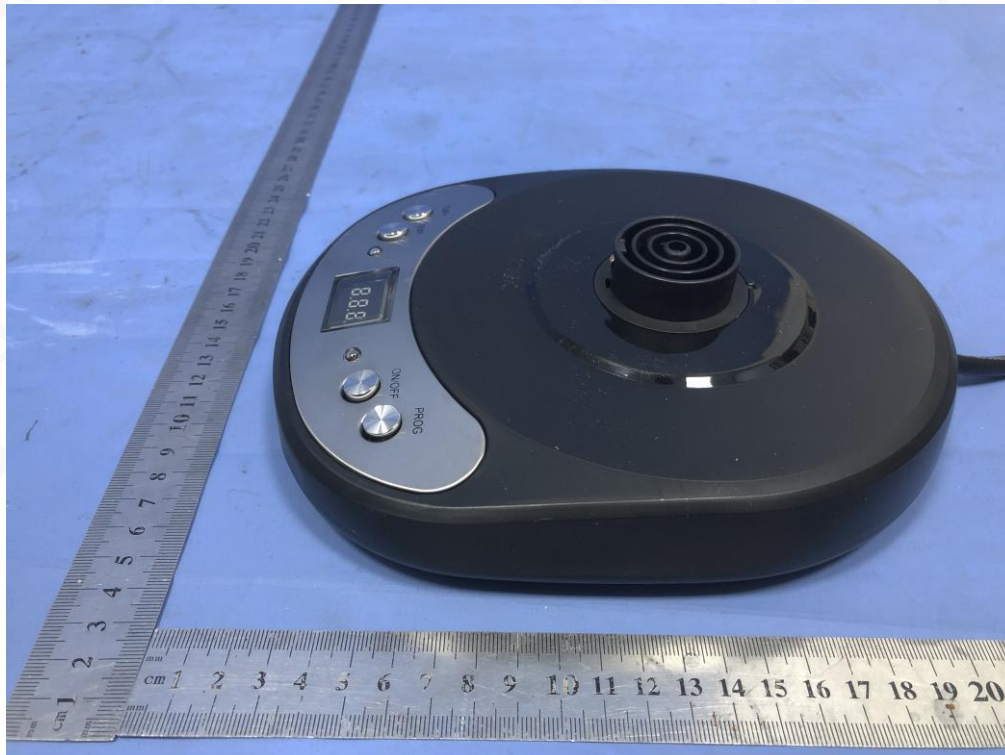
FRONT VIEW OF EUT



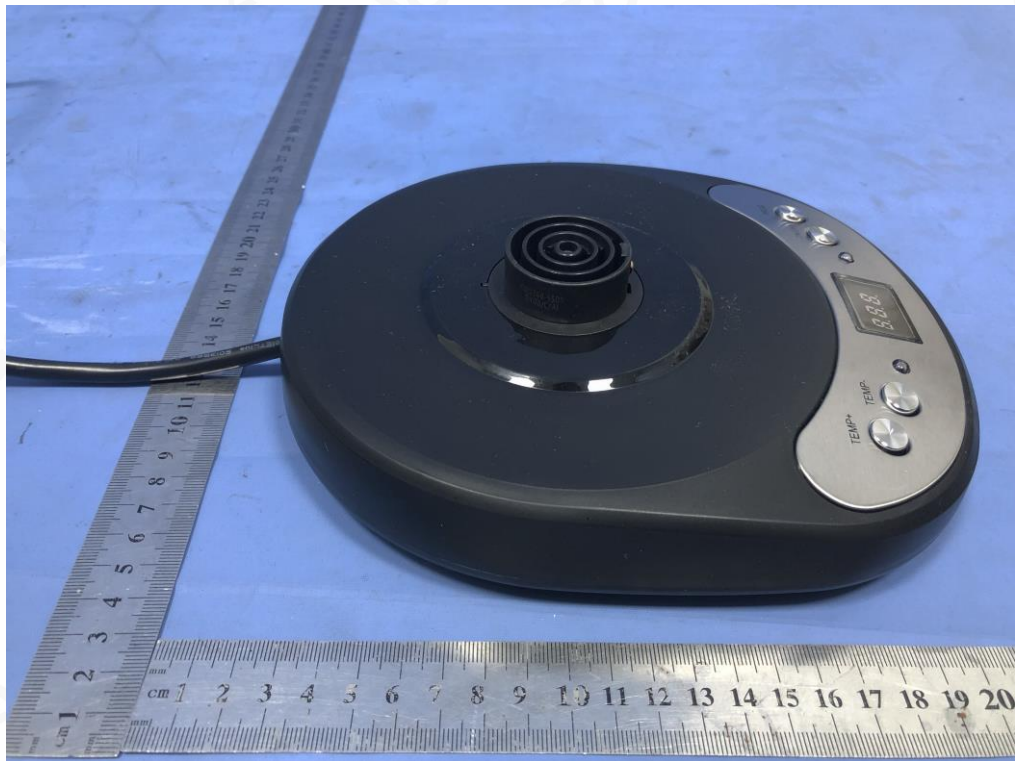
BACK VIEW OF EUT



LEFT VIEW OF EUT



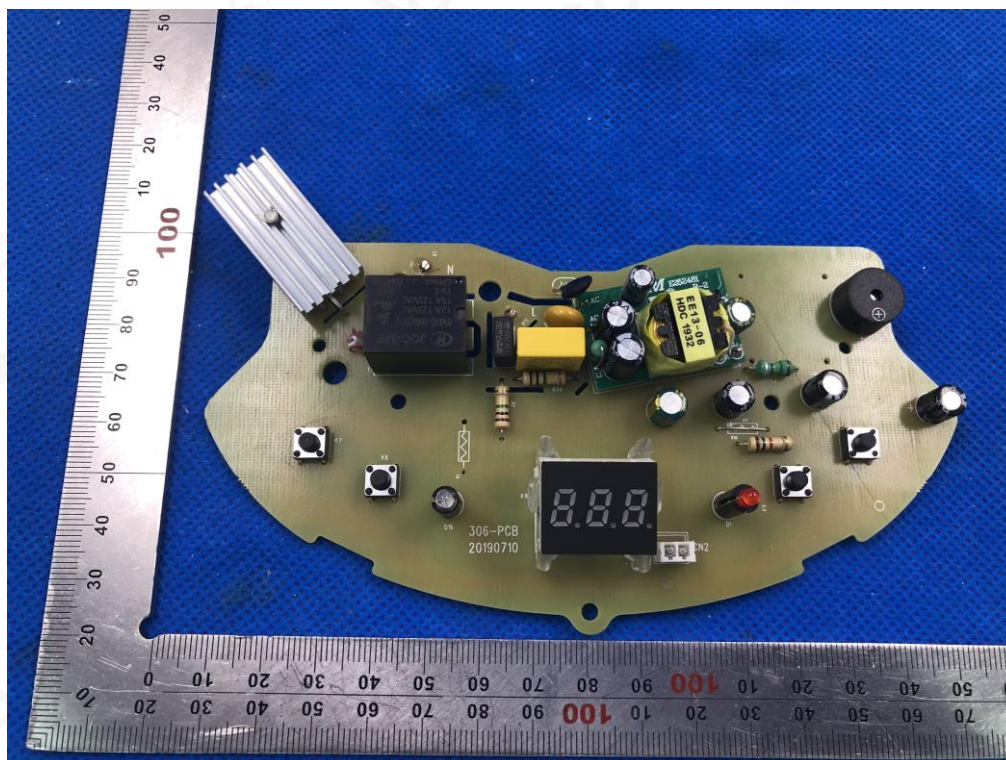
RIGHT VIEW OF EUT



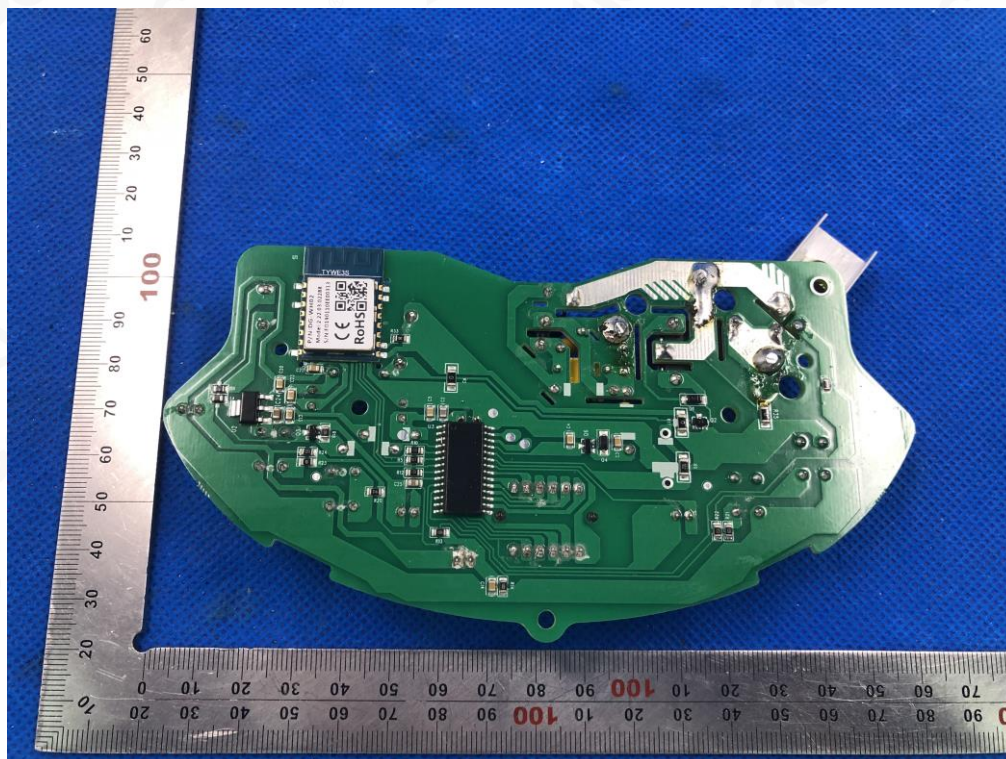
OPEN VIEW OF EUT-1



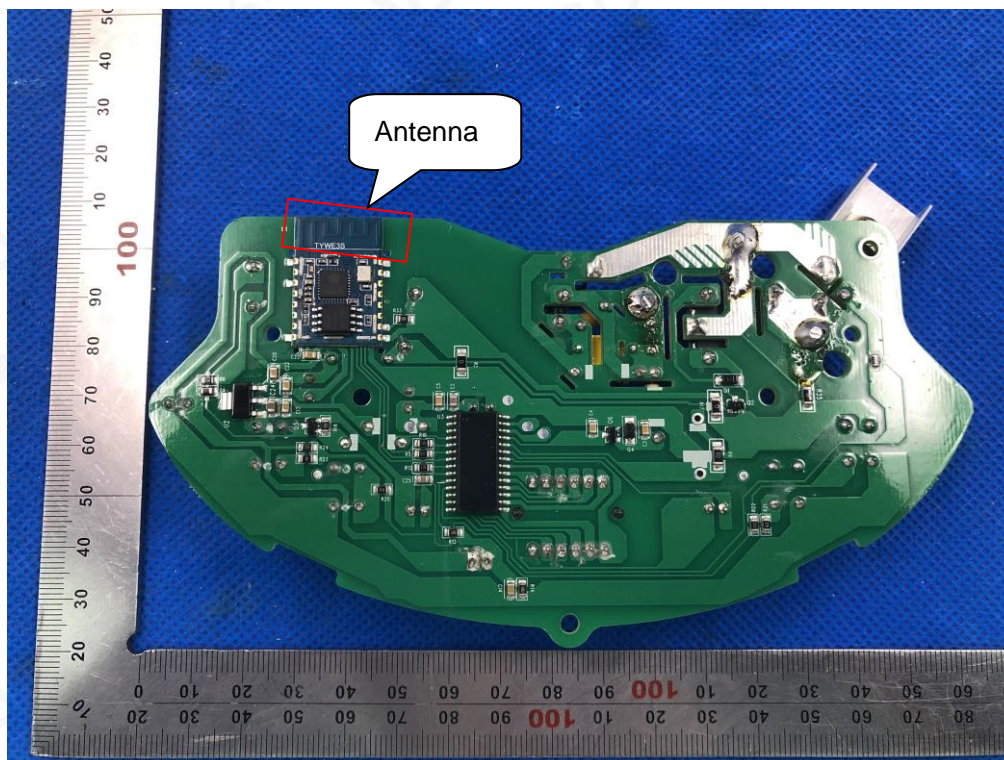
INTERNAL VIEW OF EUT-1



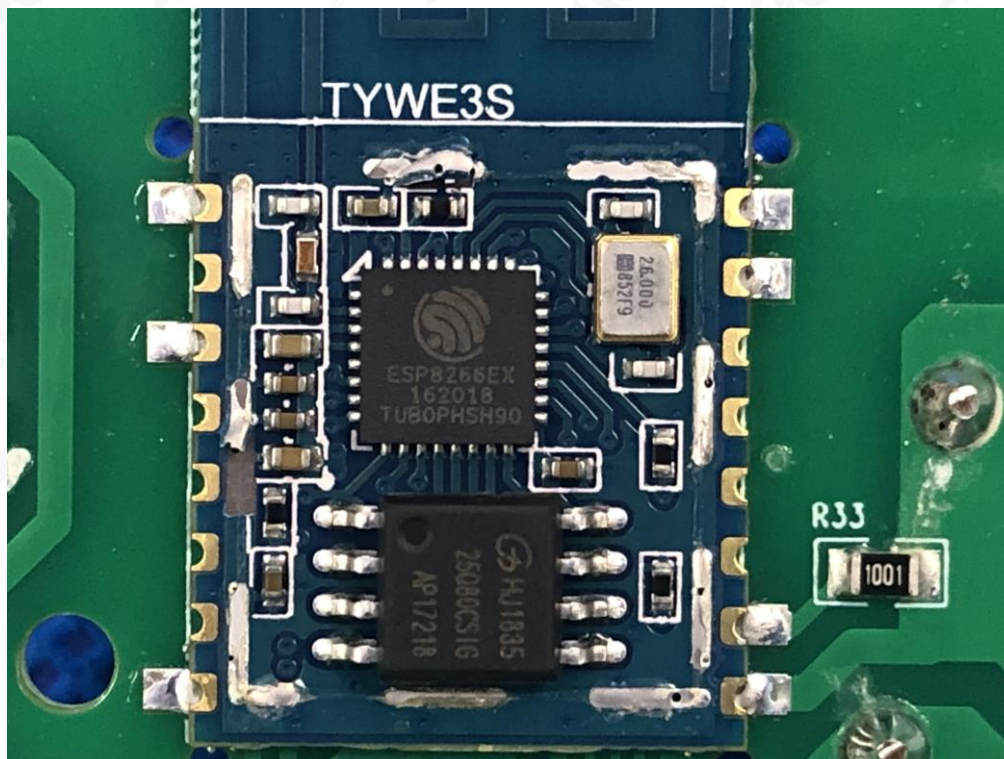
INTERNAL VIEW OF EUT-2



INTERNAL VIEW OF EUT-3



INTERNAL VIEW OF EUT-4



----END OF REPORT----