EUT	pHin Wireless Bridge	Model Name	CY-WB1900-A1
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 3	Antenna	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4960.03	50.19	0.22	50.41	74.00	-23.59	peak
4960.03	48.39	0.22	48.61	54.00	-5.39	AVG
7440.045	45.34	2.64	47.98	74.00	-26.02	peak
7440.045	43.06	2.64	45.70	54.00	-8.31	AVG
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT	pHin Wireless Bridge	Model Name	CY-WB1900-A1
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 3	Antenna	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4960.03	51.25	0.22	51.47	74.00	-22.53	peak
4960.03	48.39	0.22	48.61	54.00	-5.39	AVG
7440.045	44.97	2.64	47.61	74.00	-26.39	peak
7440.045	42.38	2.64	45.02	54.00	-8.98	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.

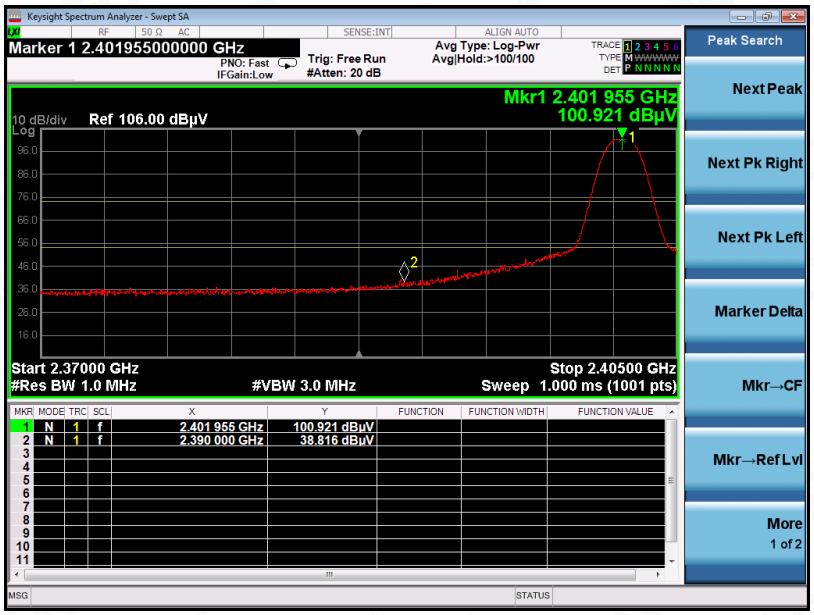
Factor = Antenna Factor + Cable loss - Amplifier gain, Over=Measure-Limit.

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

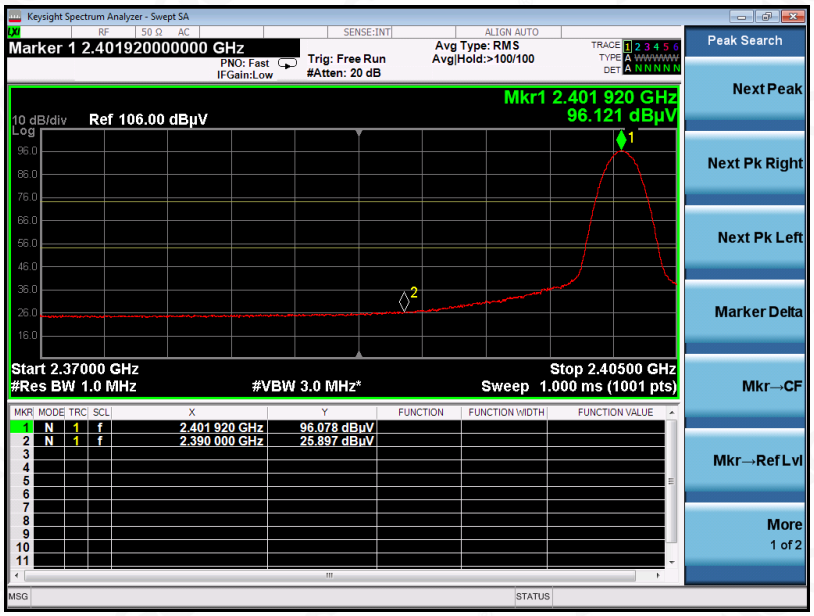
TEST RESULT FOR RESTRICTED BANDS REQUIREMENTS

EUT	pHin Wireless Bridge	Model Name	CY-WB1900-A1
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Horizontal

PK



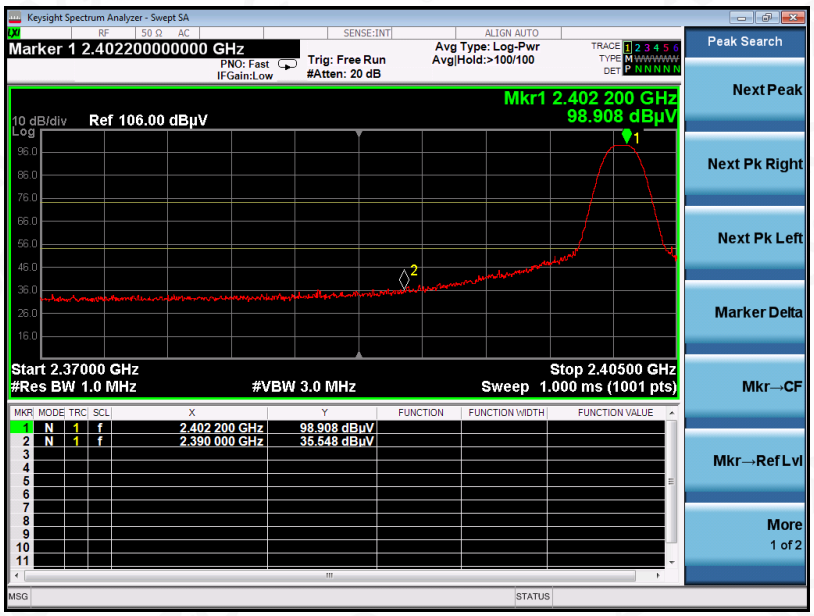
AV



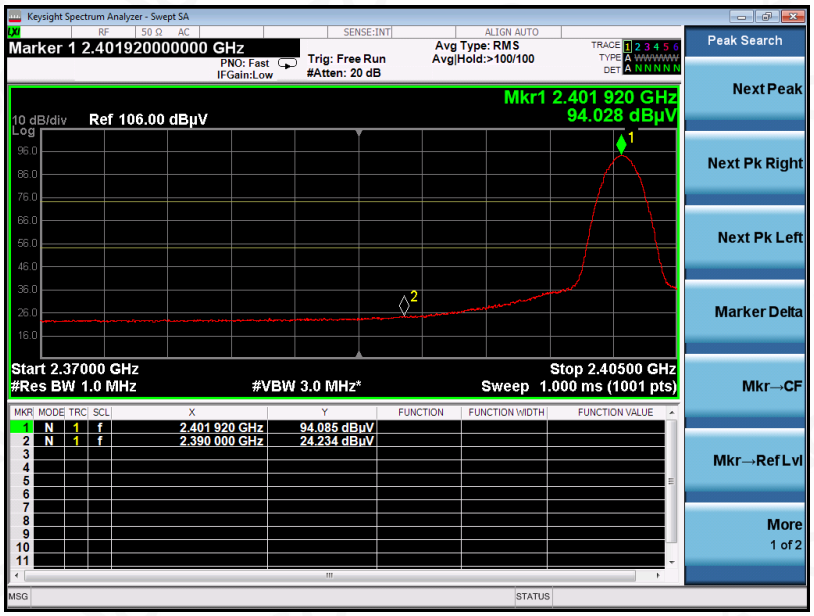
RESULT: PASS

EUT	pHin Wireless Bridge	Model Name	CY-WB1900-A1
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Vertical

PK



AV

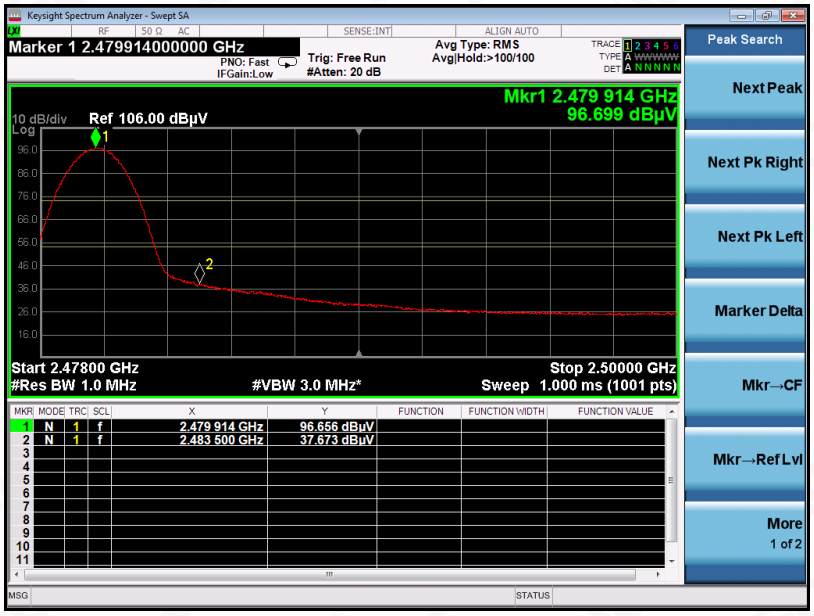


RESULT: PASS

EUT	pHin Wireless Bridge	Model Name	CY-WB1900-A1
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 3	Antenna	Horizontal

PK

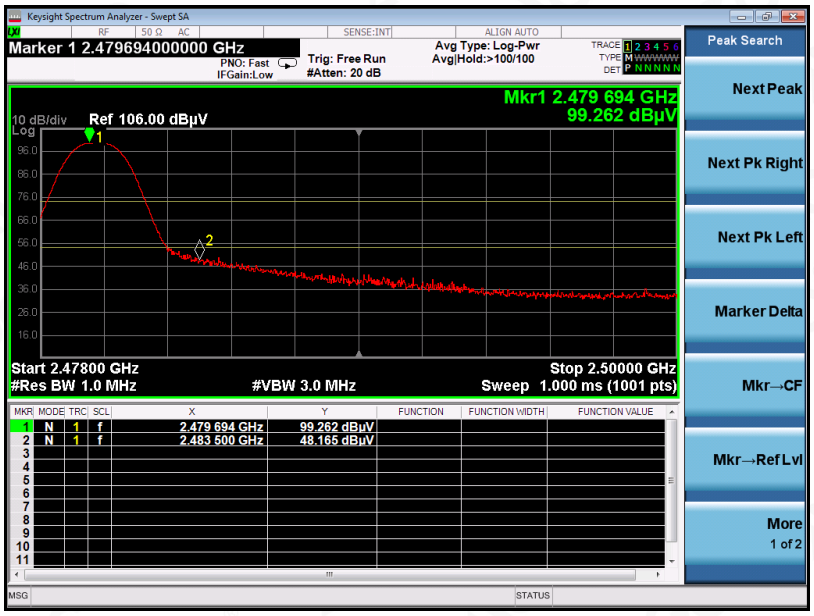
AV



RESULT: PASS

EUT	pHin Wireless Bridge	Model Name	CY-WB1900-A1
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 3	Antenna	Vertical

PK



AV

RESULT: PASS

Note: 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(µV) to represent the Amplitude. Use the F dB(µV/m) to represent the Field Strength. So A=F.

12. FCC LINE CONDUCTED EMISSION TEST

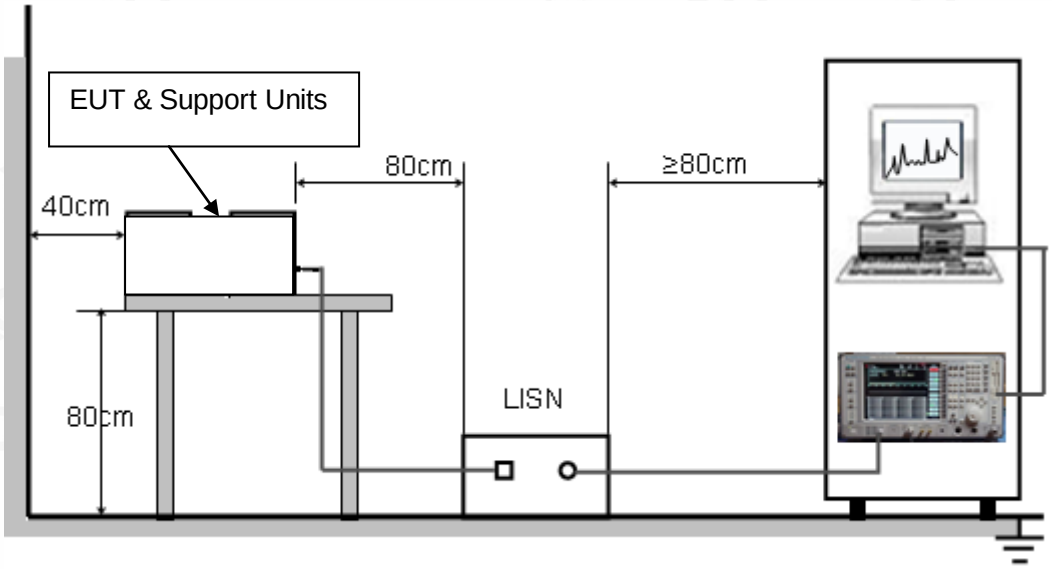
12.1. LIMITS OF LINE CONDUCTED EMISSION TEST

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 0.50 MHz.

12.2. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST



12.3. PRELIMINARY 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. All support equipments received AC120V/60Hz power from a LISN, if any.
5. The EUT received DC charging voltage by adapter which received AC120V/60Hz power by a LISN..
6. The 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.
7. Analyzer / Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.
8. During the above scans, the emissions were maximized by cable manipulation.
9. The test mode(s) were scanned during the preliminary test.

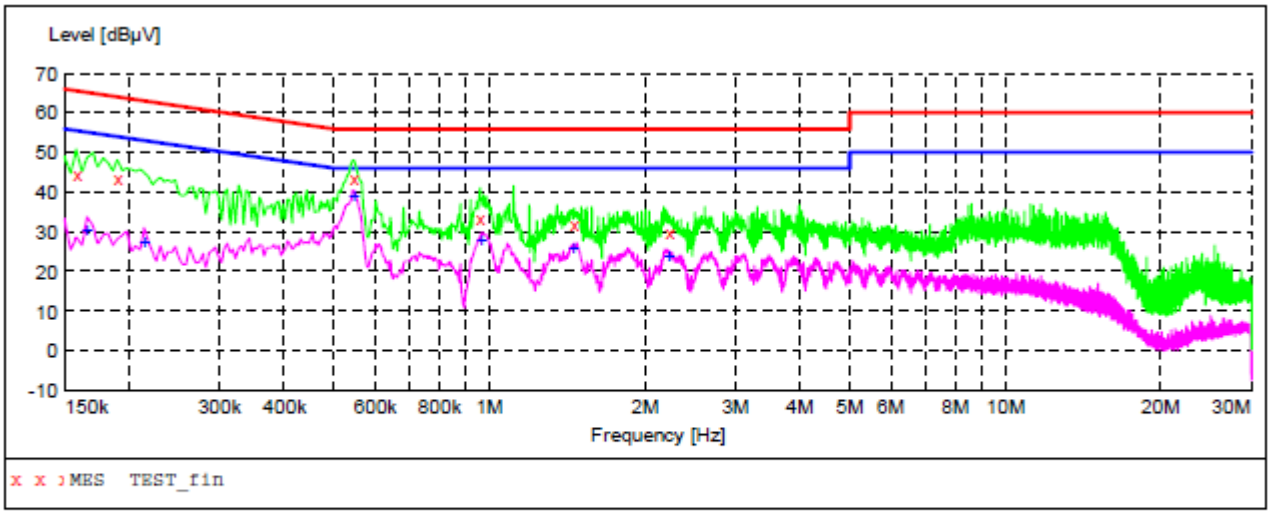
Then, the EUT configuration and cable configuration of the above highest emission level were recorded for reference of final testing.

12.4. FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST

1. EUT and support equipment was set up on the test bench as per step 2 of the preliminary test.
2. A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. 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.
3. The test data of the worst case condition(s) was reported on the Summary Data page.

12.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST

Line Conducted Emission Test Line 1-L



MEASUREMENT RESULT: "TEST_fin"

7/24/2019 2:29PM

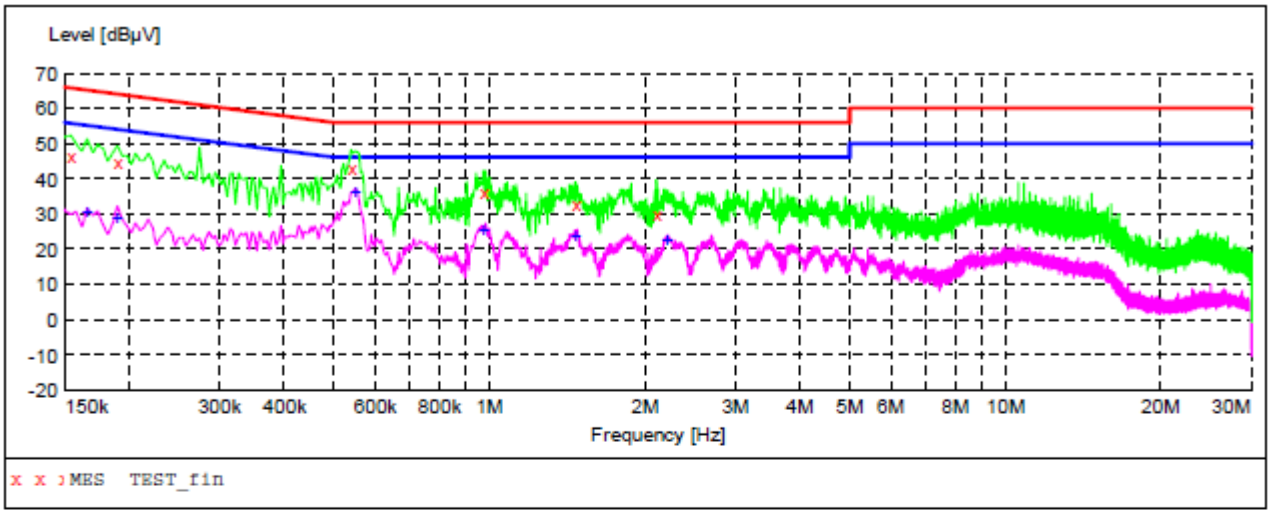
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.158000	44.40	10.8	66	21.2	QP	L1	FLO
0.190000	43.60	10.9	64	20.4	QP	L1	FLO
0.546000	43.60	11.0	56	12.4	QP	L1	FLO
0.958000	33.50	11.3	56	22.5	QP	L1	FLO
1.454000	31.80	11.5	56	24.2	QP	L1	FLO
2.230000	30.20	11.5	56	25.8	QP	L1	FLO

MEASUREMENT RESULT: "TEST_fin2"

7/24/2019 2:29PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.166000	30.60	10.8	55	24.6	AV	L1	FLO
0.214000	27.30	10.9	53	25.7	AV	L1	FLO
0.546000	39.10	11.0	46	6.9	AV	L1	FLO
0.966000	28.20	11.3	46	17.8	AV	L1	FLO
1.454000	26.10	11.5	46	19.9	AV	L1	FLO
2.230000	24.00	11.5	46	22.0	AV	L1	FLO

Line Conducted Emission Test Line 2-N



MEASUREMENT RESULT: "TEST_fin"

7/24/2019 2:19PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.154000	46.60	10.8	66	19.2	QP	N	FLO
0.190000	44.90	10.9	64	19.1	QP	N	FLO
0.538000	43.20	11.0	56	12.8	QP	N	FLO
0.974000	36.10	11.4	56	19.9	QP	N	FLO
1.466000	33.00	11.5	56	23.0	QP	N	FLO
2.106000	29.90	11.5	56	26.1	QP	N	FLO

MEASUREMENT RESULT: "TEST_fin2"

7/24/2019 2:19PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.166000	30.40	10.8	55	24.8	AV	N	FLO
0.190000	28.90	10.9	54	25.1	AV	N	FLO
0.550000	36.20	11.0	46	9.8	AV	N	FLO
0.974000	25.70	11.4	46	20.3	AV	N	FLO
1.466000	24.00	11.5	46	22.0	AV	N	FLO
2.206000	22.70	11.5	46	23.3	AV	N	FLO

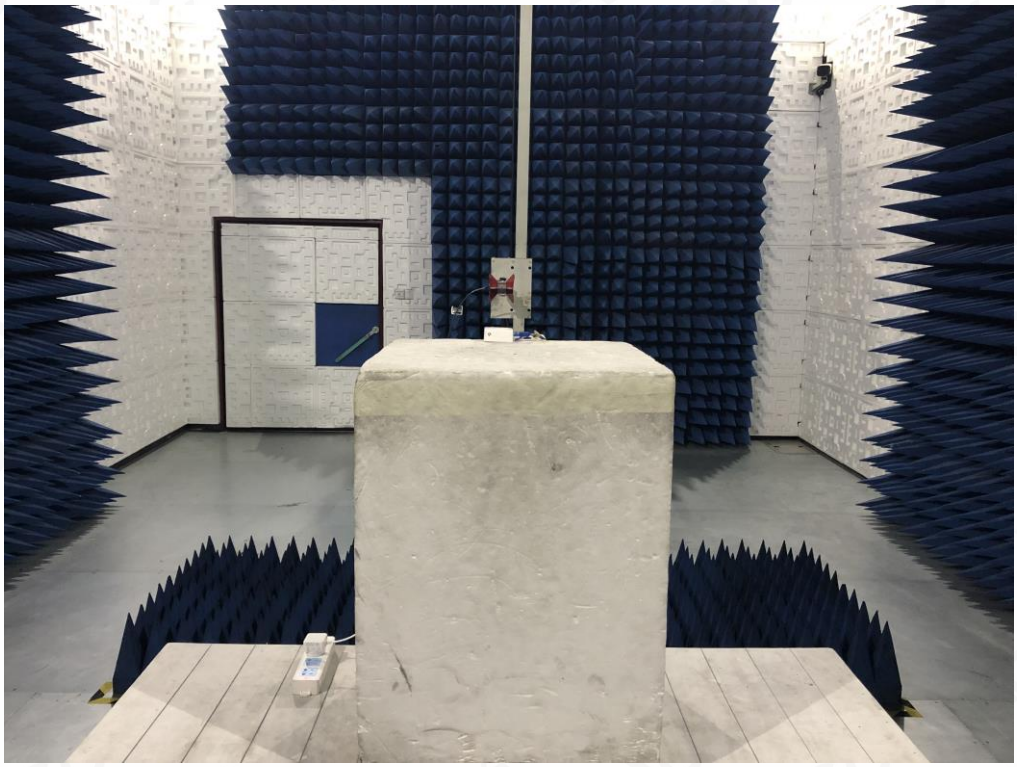
RESULT: PASS

Note: All the test modes had been tested, the mode 1 was the worst case. Only the data of the worst case would be record in this test report.

APPENDIX A: PHOTOGRAPHS OF TEST SETUP

RADIATED EMISSION TEST SETUP BELOW 1GHZ

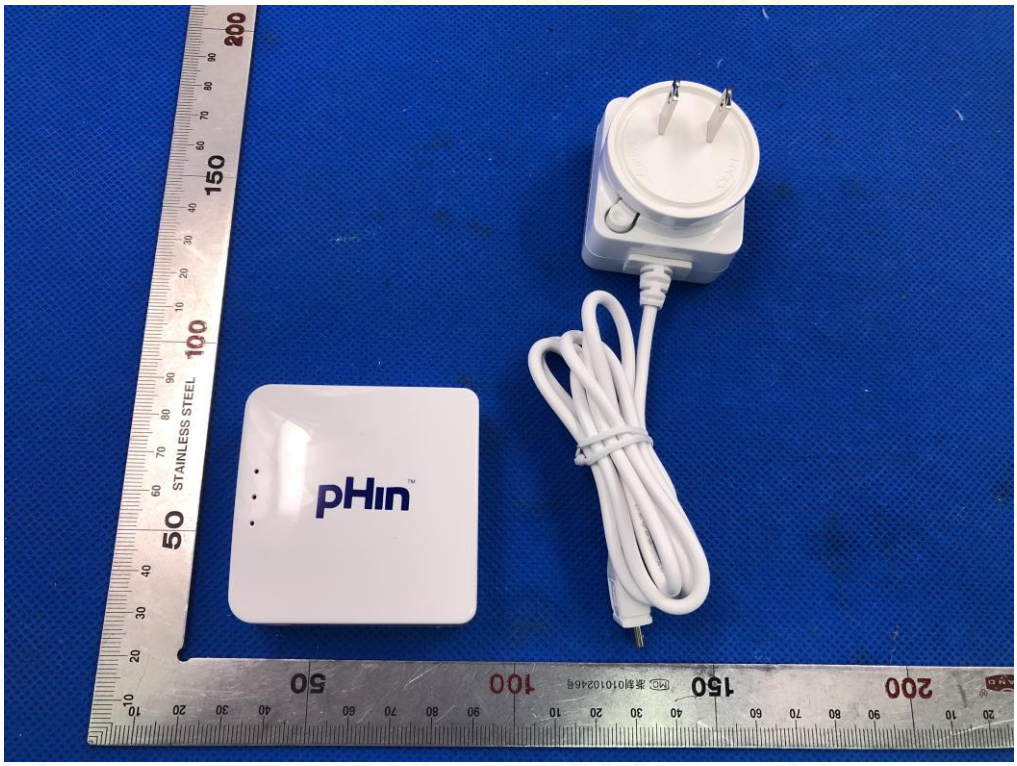
RADIATED EMISSION TEST SETUP ABOVE 1GHZ



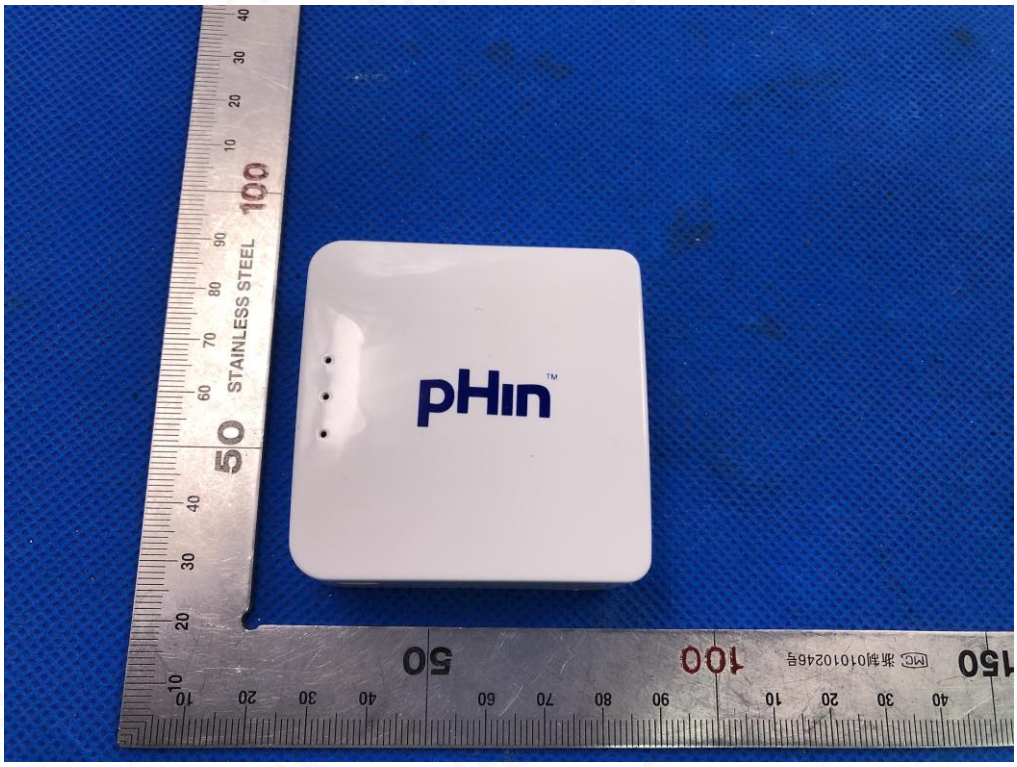
CONDUCTED EMISSION TEST SETUP

APPENDIX B: PHOTOGRAPHS OF EUT

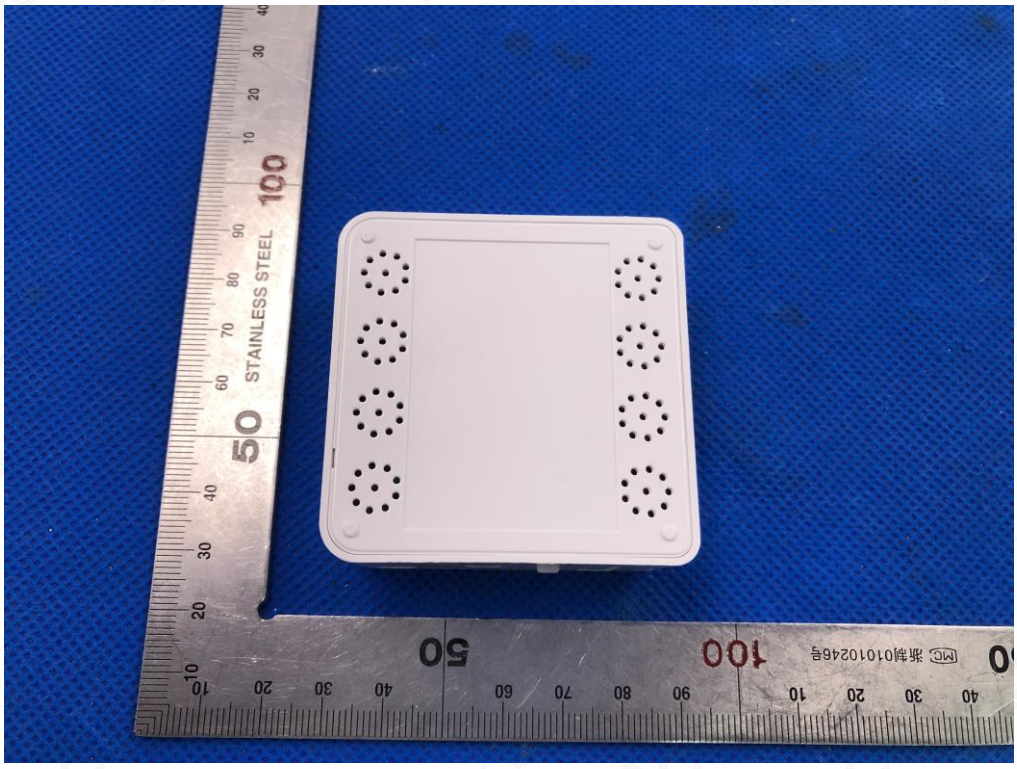
ALL VIEW OF EUT



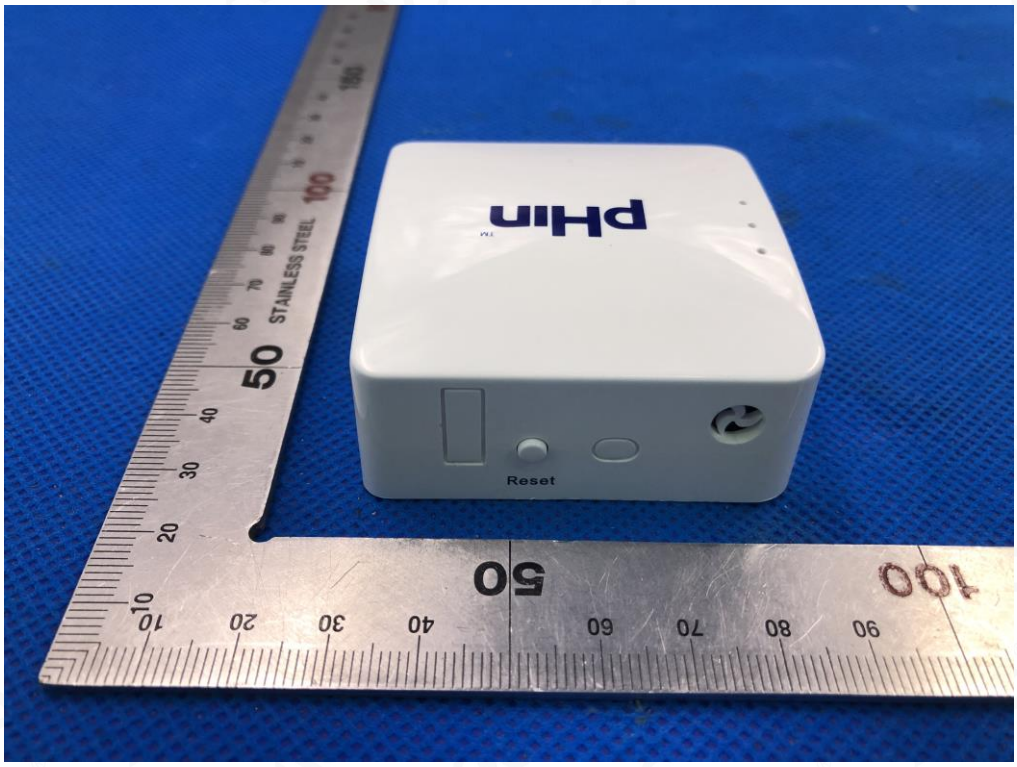
TOP VIEW OF EUT



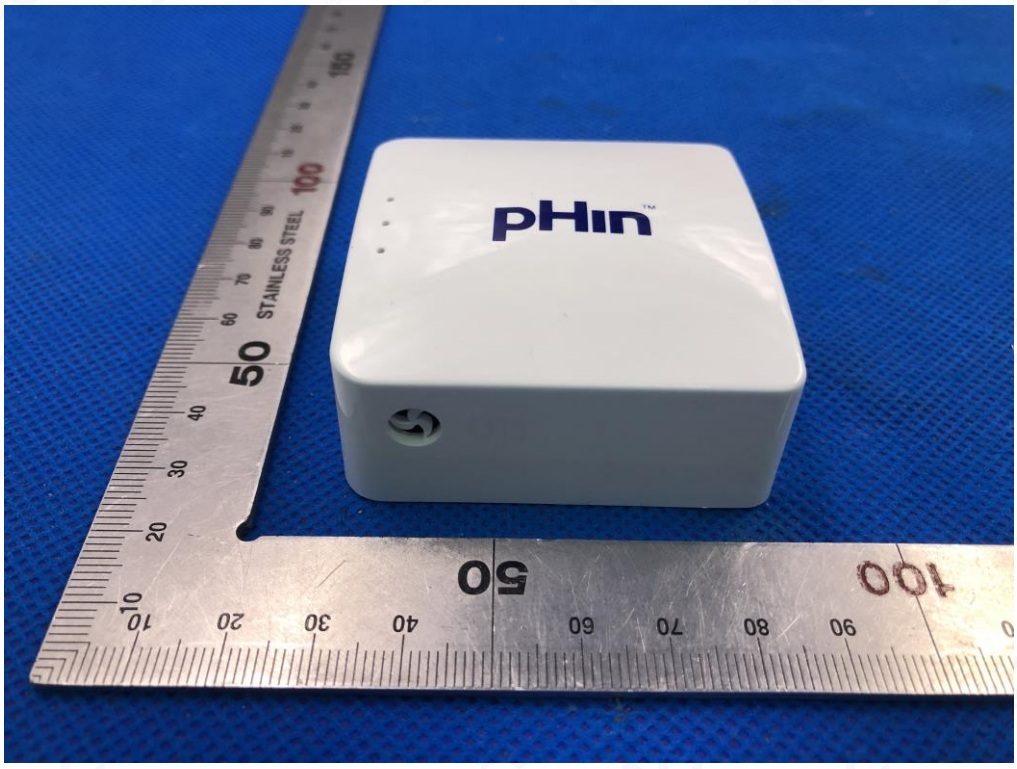
BOTTOM VIEW OF EUT



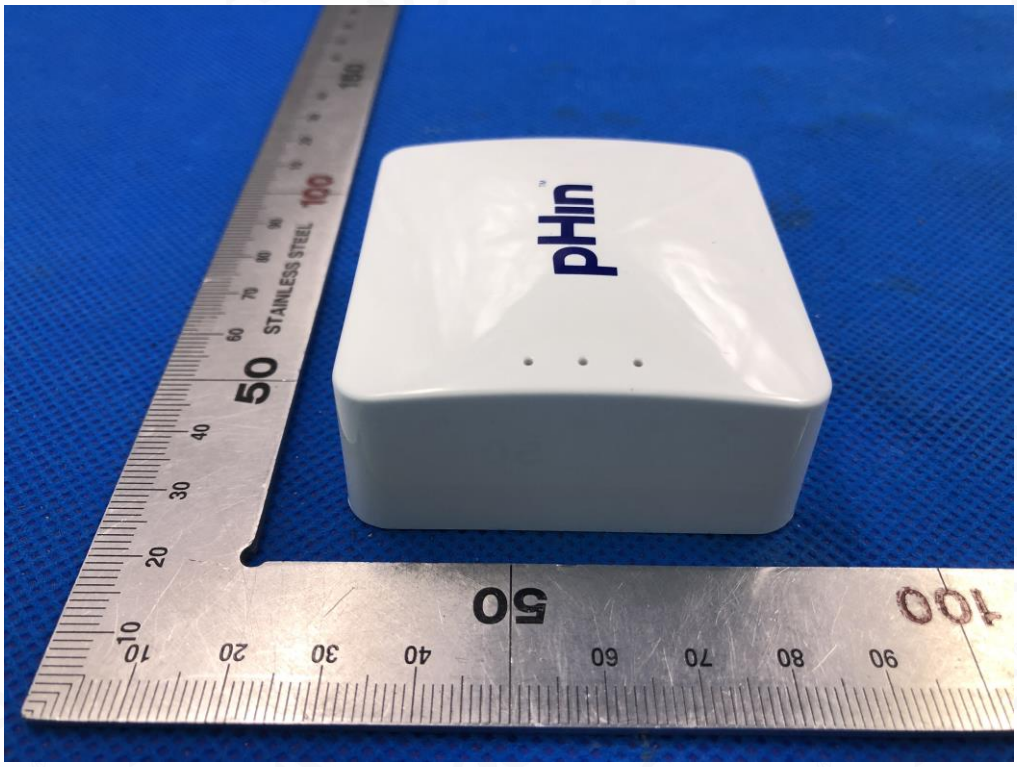
FRONT VIEW OF EUT



BACK VIEW OF EUT

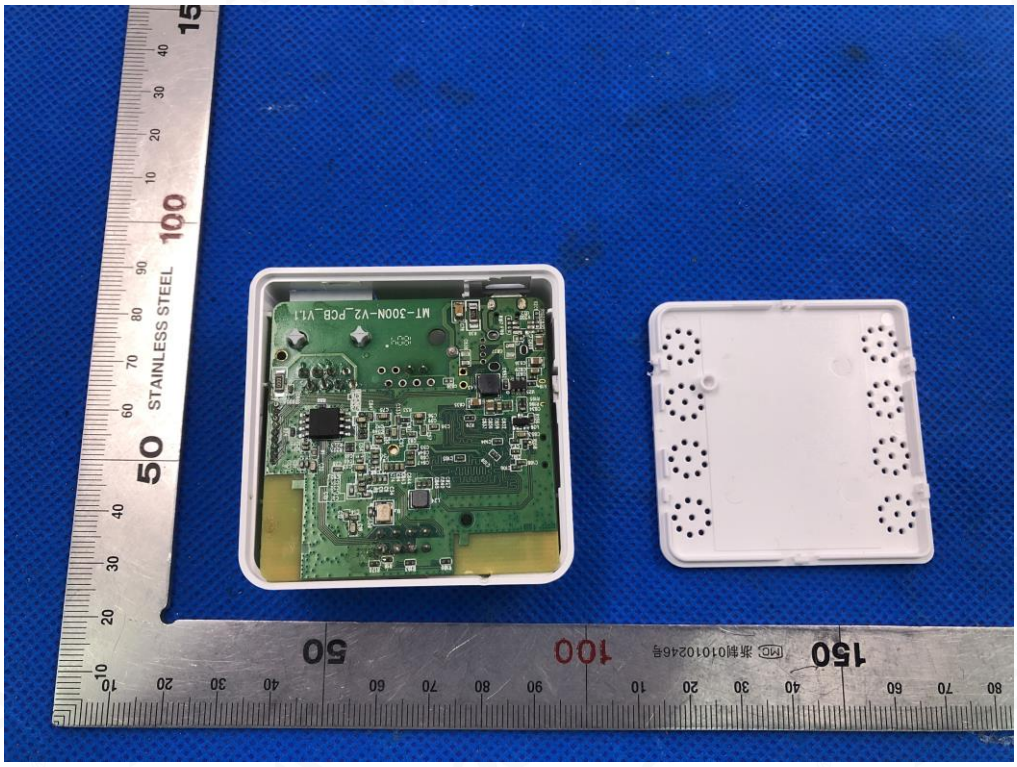


LEFT VIEW OF EUT

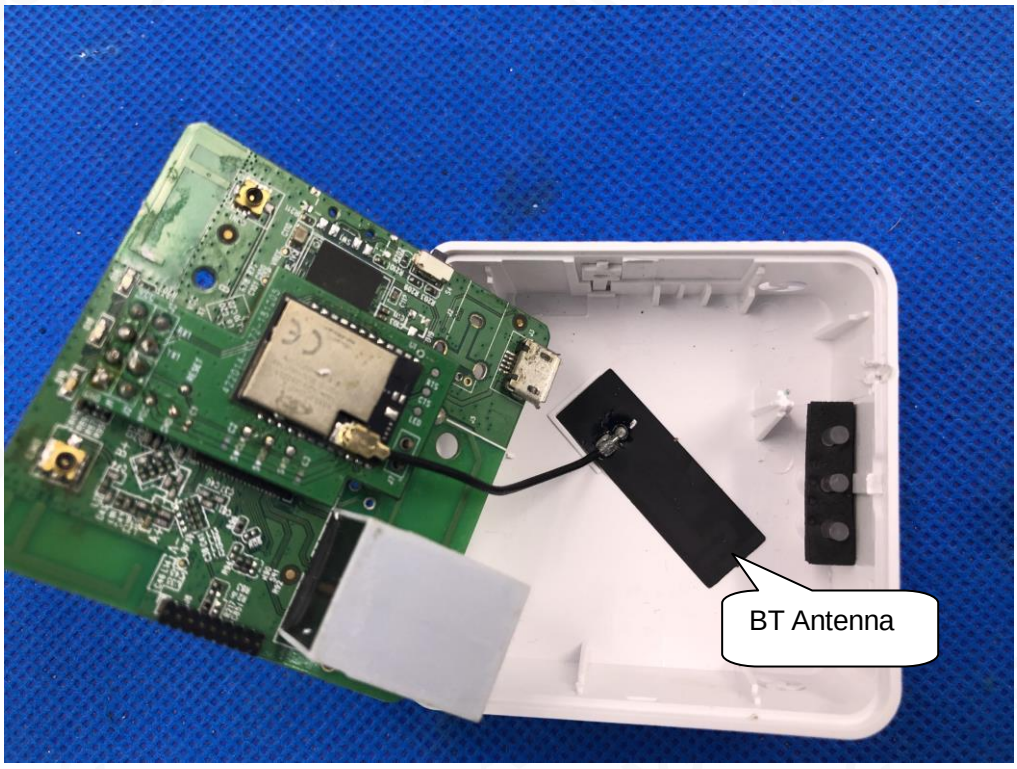


RIGHT VIEW OF EUT

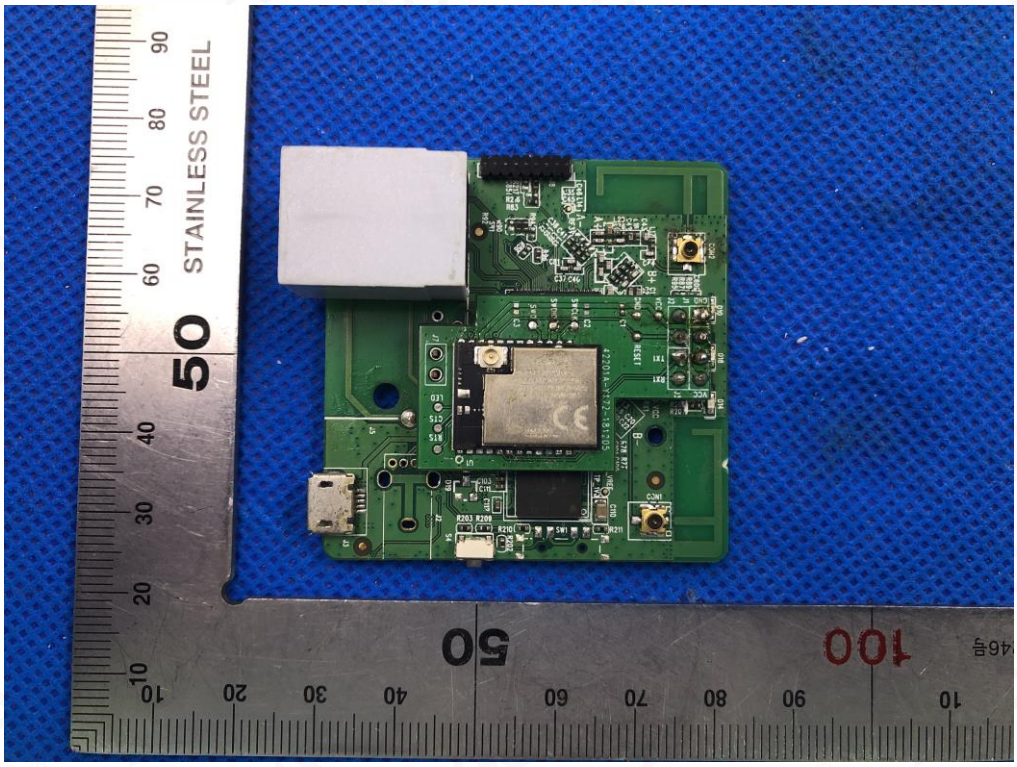
OPEN VIEW OF EUT



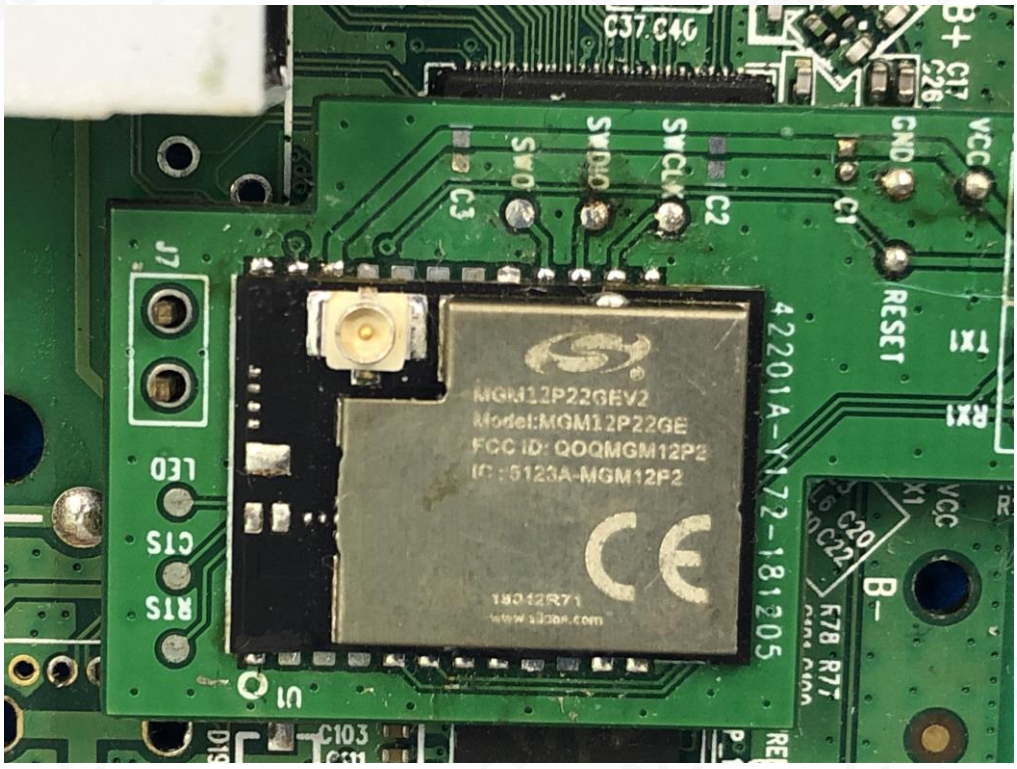
INTERNAL VIEW OF EUT-1



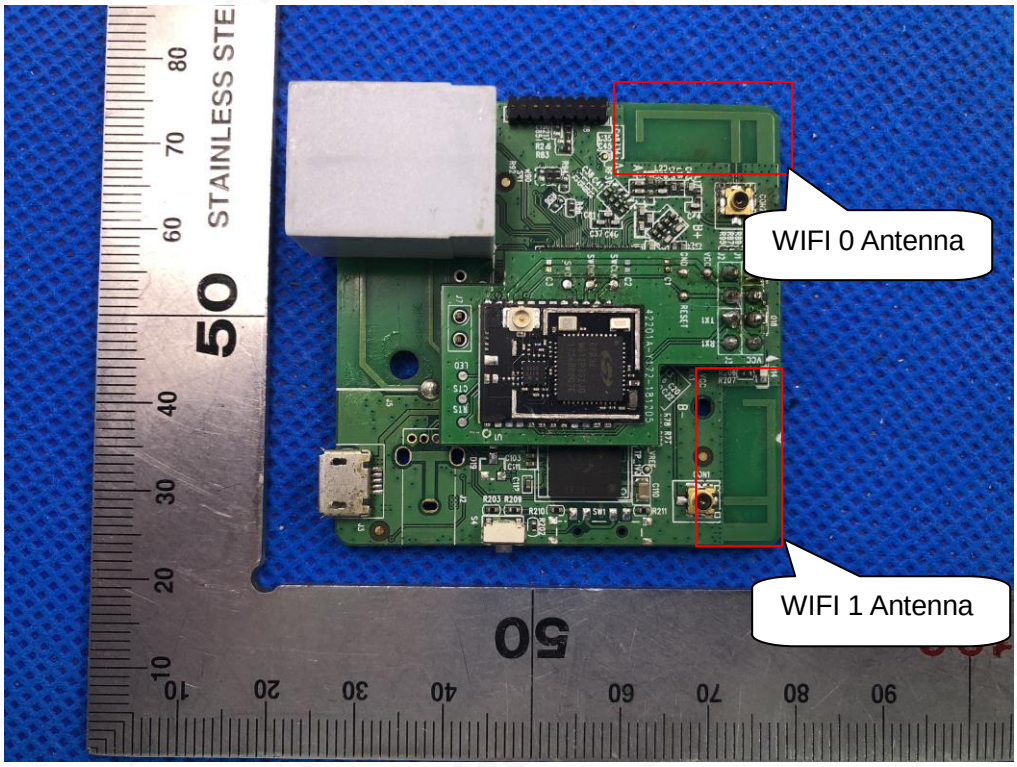
INTERNAL VIEW OF EUT-2



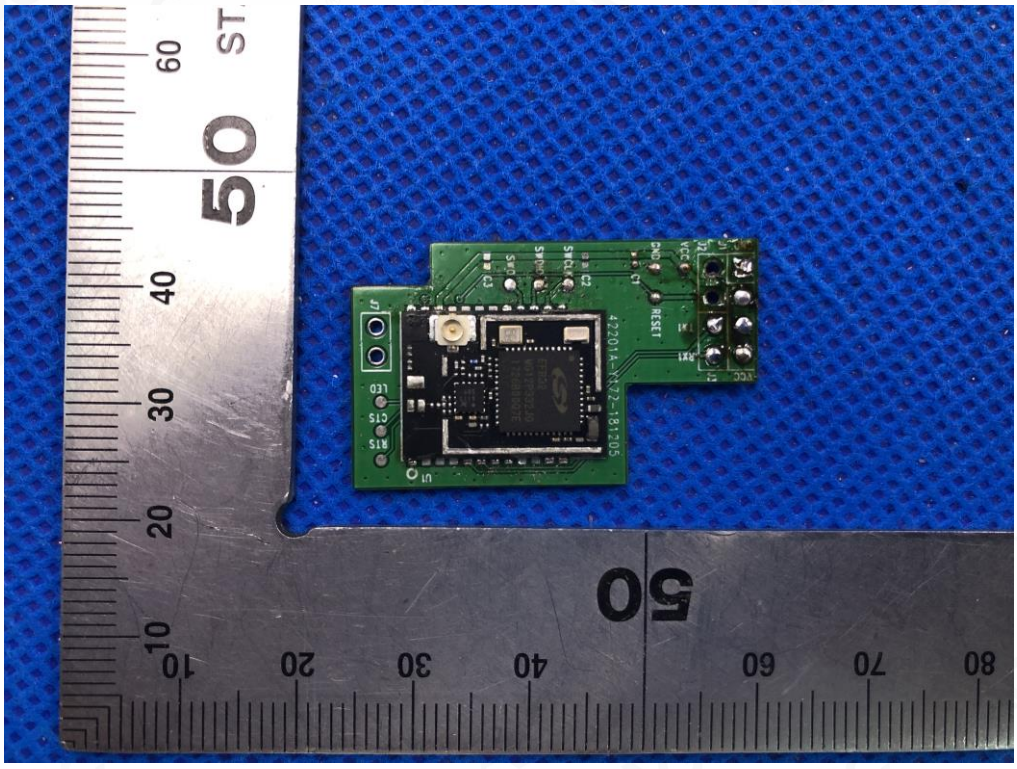
INTERNAL VIEW OF EUT-3



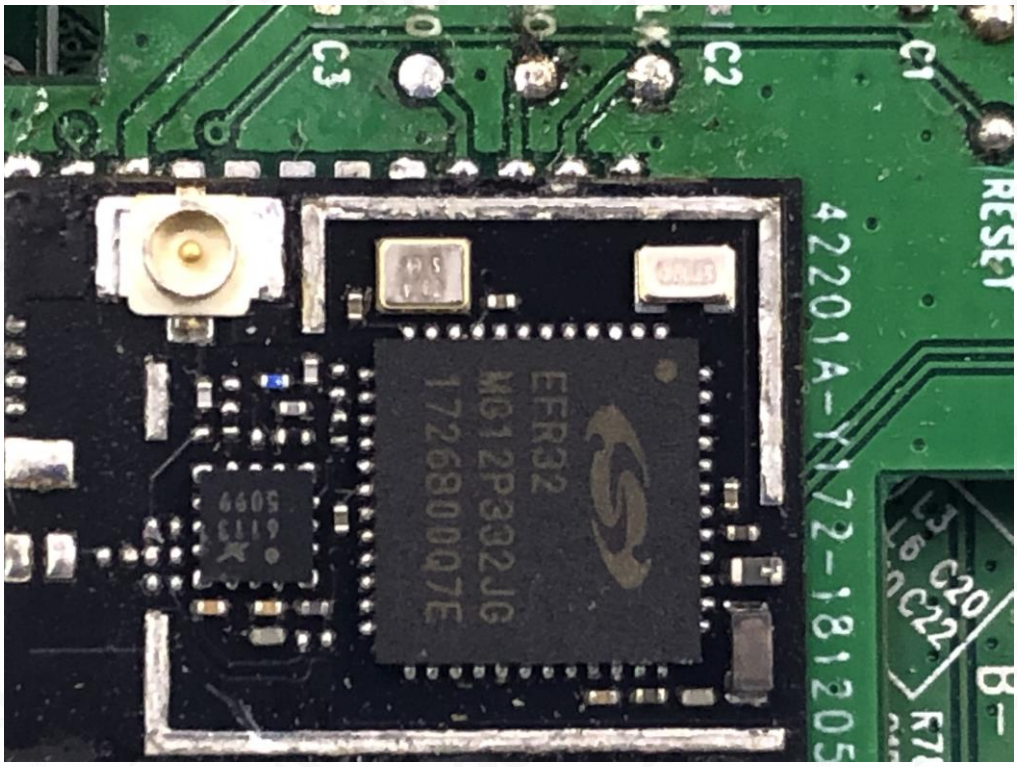
INTERNAL VIEW OF EUT-4



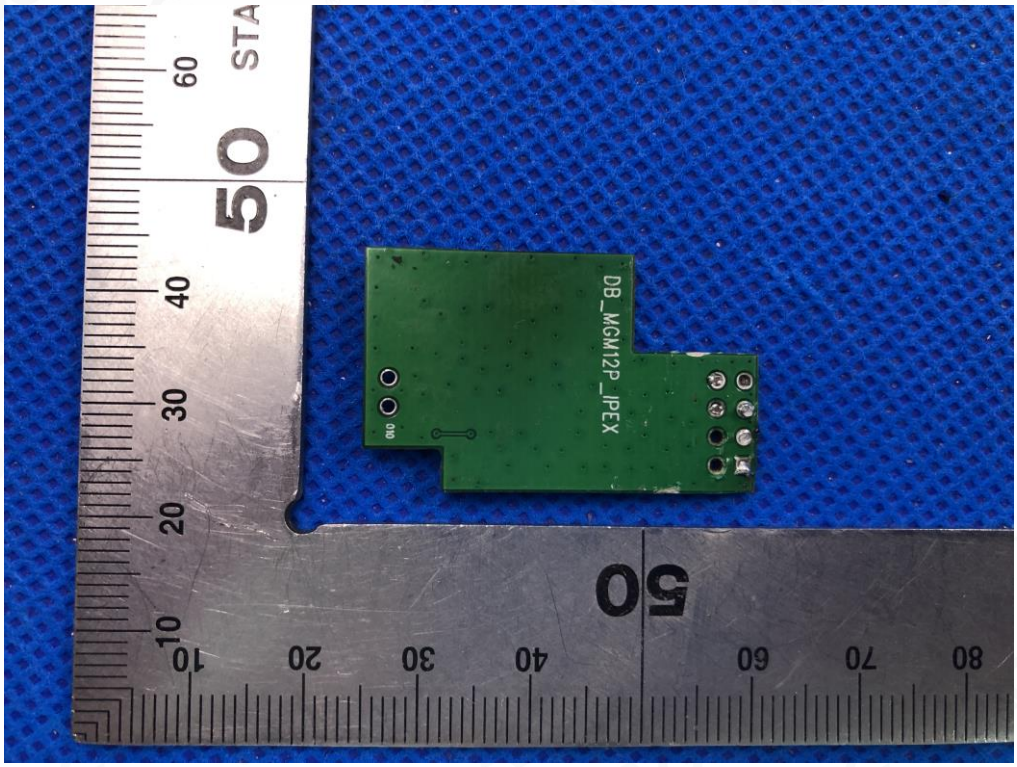
INTERNAL VIEW OF EUT-5



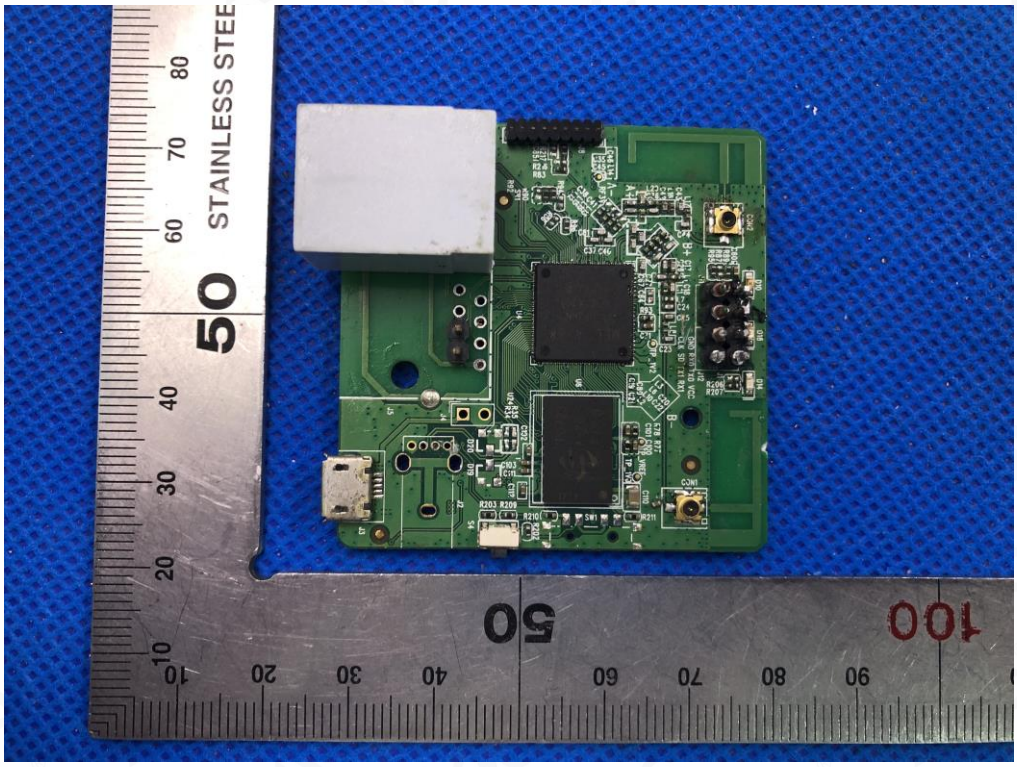
INTERNAL VIEW OF EUT-6



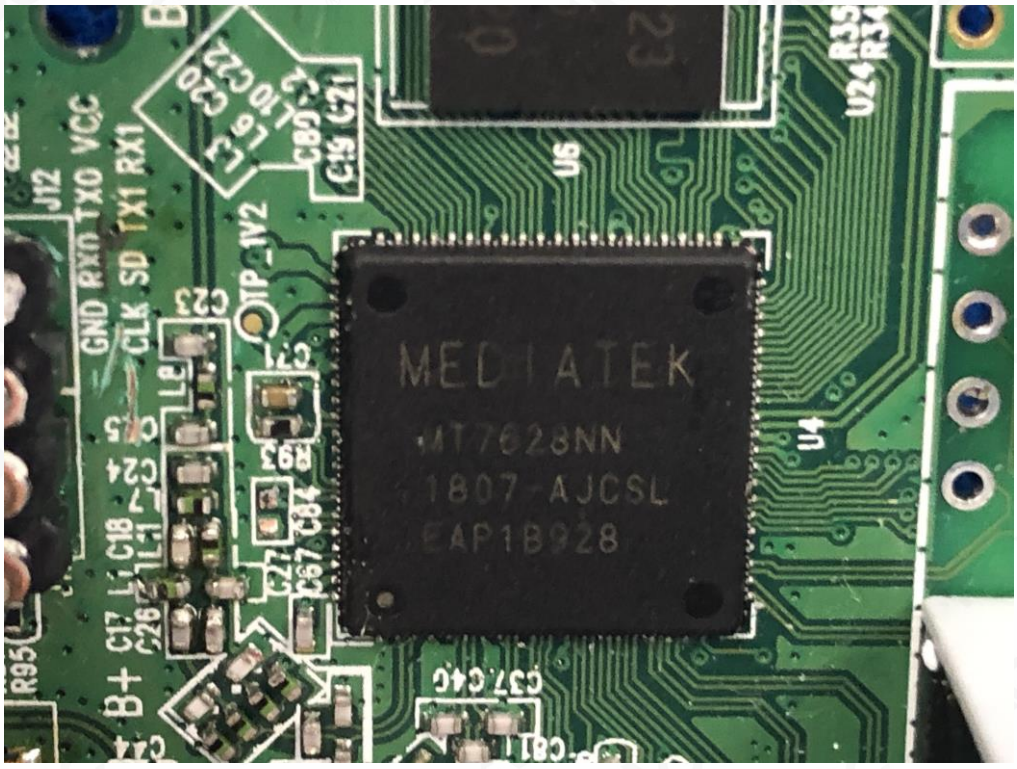
INTERNAL VIEW OF EUT-7



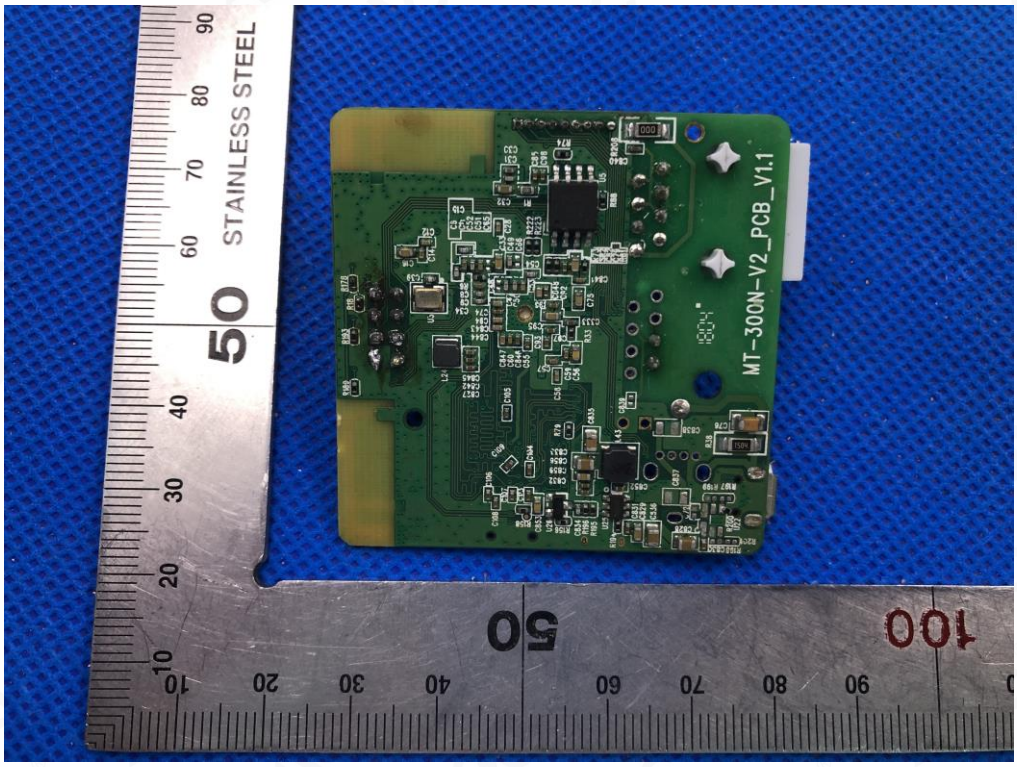
INTERNAL VIEW OF EUT-8



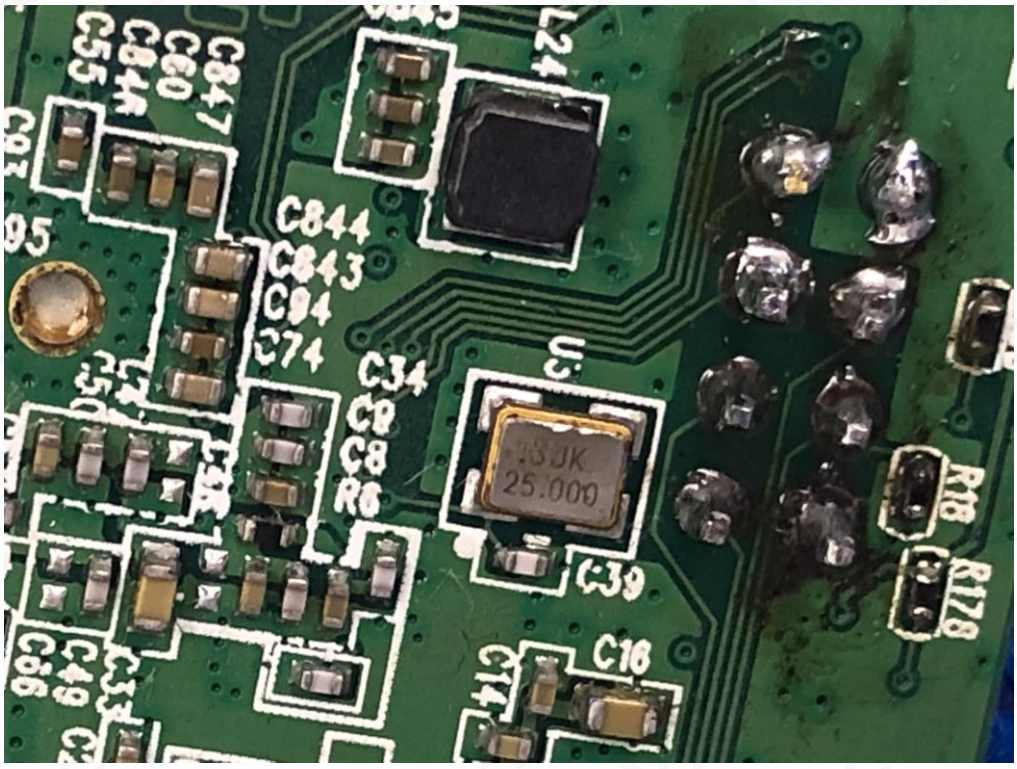
INTERNAL VIEW OF EUT-9



INTERNAL VIEW OF EUT-10



INTERNAL VIEW OF EUT-11



----END OF REPORT----