

EUT	Linkit BLE- WiFi Gateway	Model Name	WB10PE
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



EUT	Linkit BLE- WiFi Gateway	Model Name	WB10PE
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

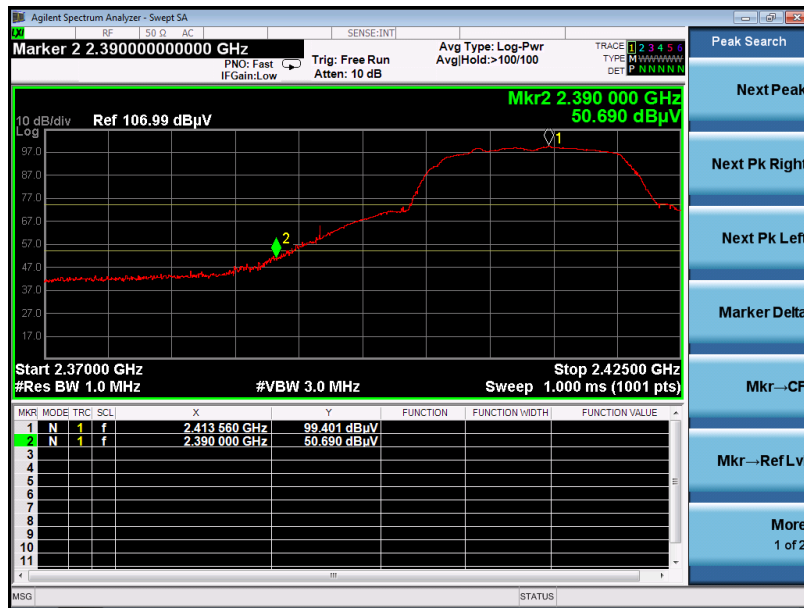


AV



EUT	Linkit BLE- WiFi Gateway	Model Name	WB10PE
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

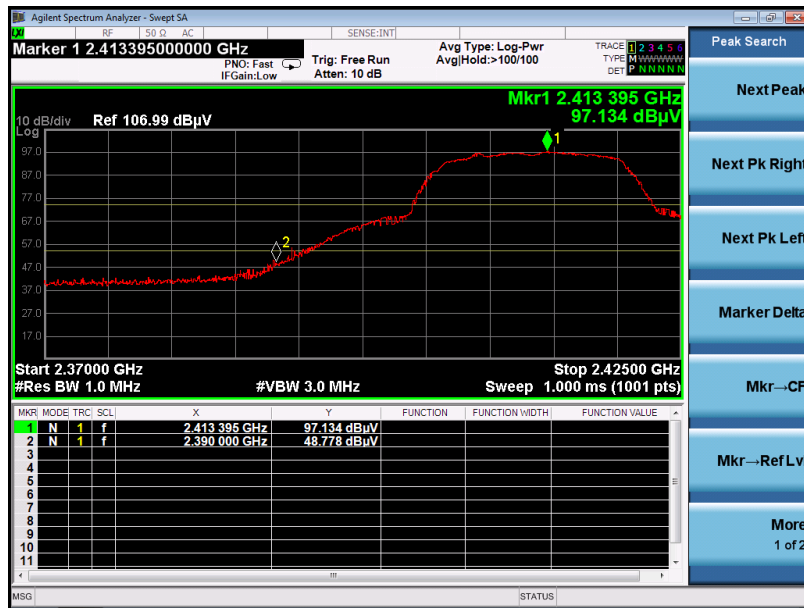


AV



EUT	Linkit BLE- WiFi Gateway	Model Name	WB10PE
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



EUT	Linkit BLE- WiFi Gateway	Model Name	WB10PE
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

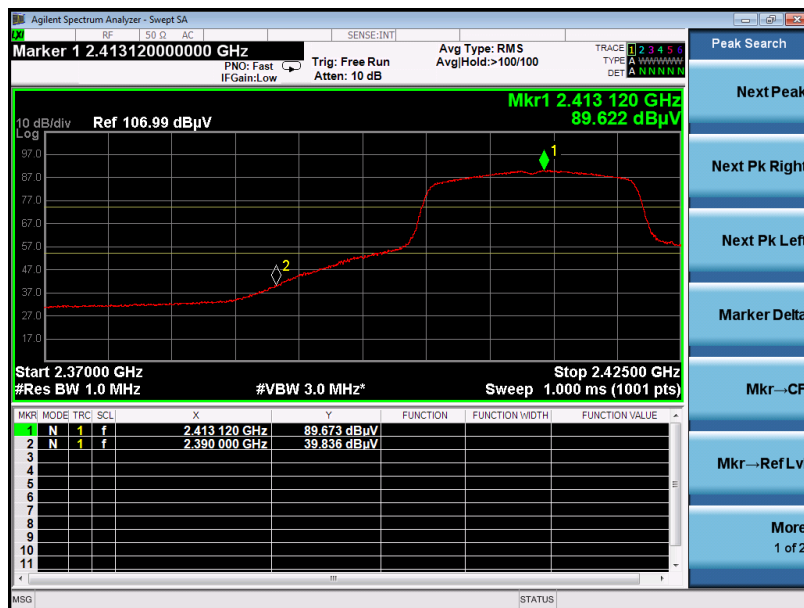


EUT	Linkit BLE- WiFi Gateway	Model Name	WB10PE
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n 20 with data rate 6.5 2412MHZ	Antenna	Horizontal

PK

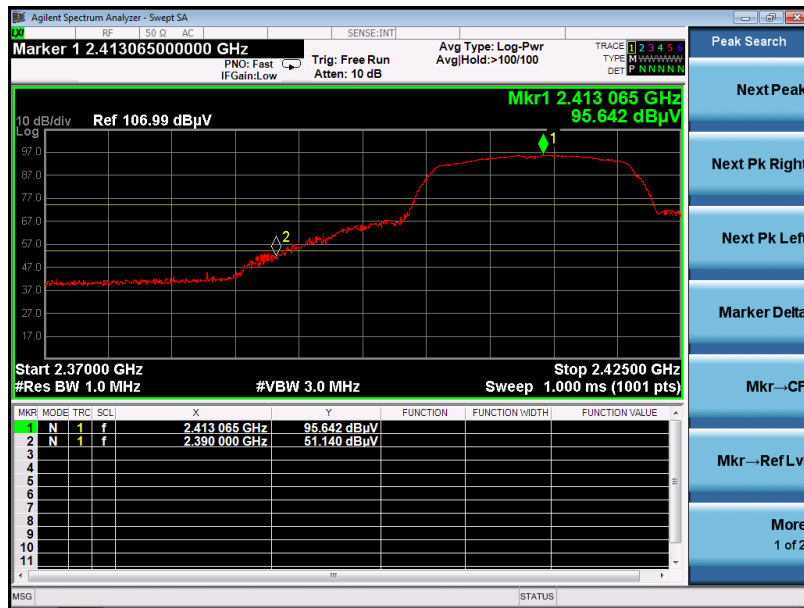


AV

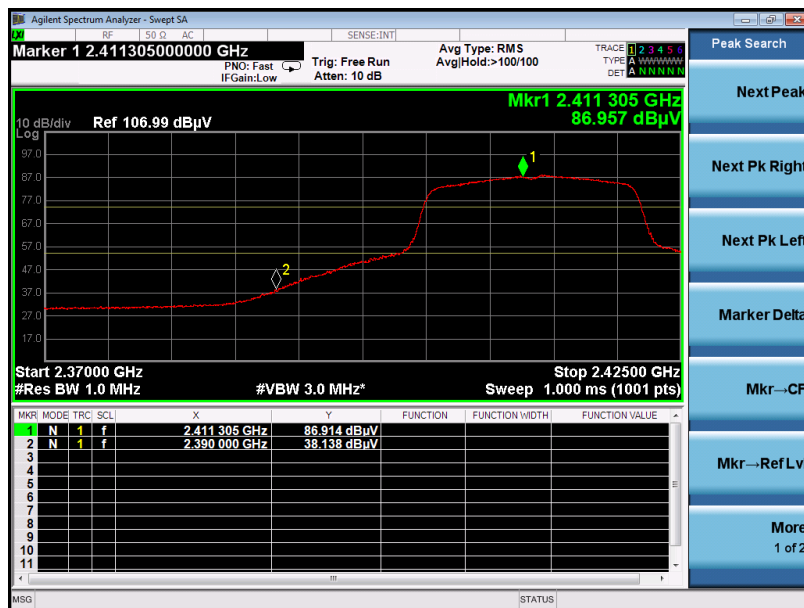


EUT	Linkit BLE- WiFi Gateway	Model Name	WB10PE
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n 20 with data rate 6.5 2412MHZ	Antenna	Vertical

PK



AV



EUT	Linkit BLE- WiFi Gateway	Model Name	WB10PE
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n 20with data rate 6.5 2462MHZ	Antenna	Horizontal

PK



AV

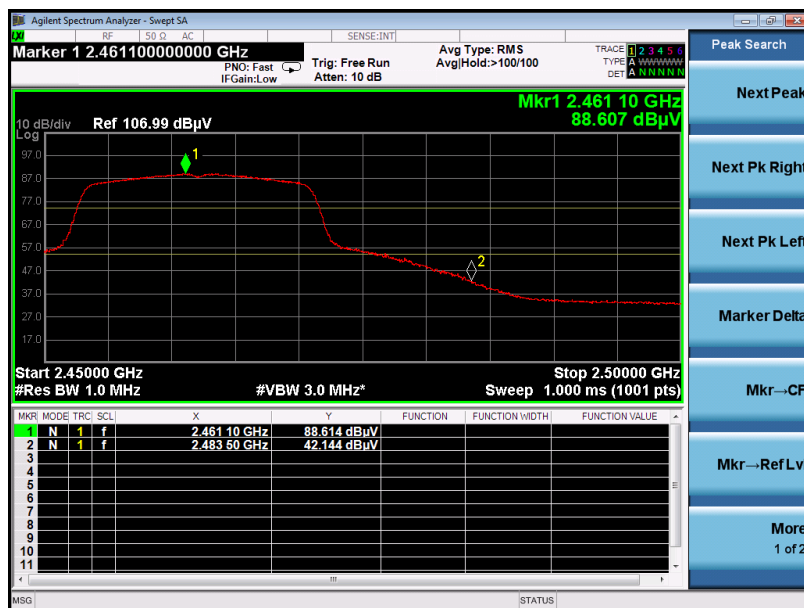


EUT	Linkit BLE- WiFi Gateway	Model Name	WB10PE
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n 20 with data rate 6.5 2462MHZ	Antenna	Vertical

PK



AV



EUT	Linkit BLE- WiFi Gateway	Model Name	WB10PE
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n 40 with data rate 6.5 2422MHZ	Antenna	Horizontal

PK

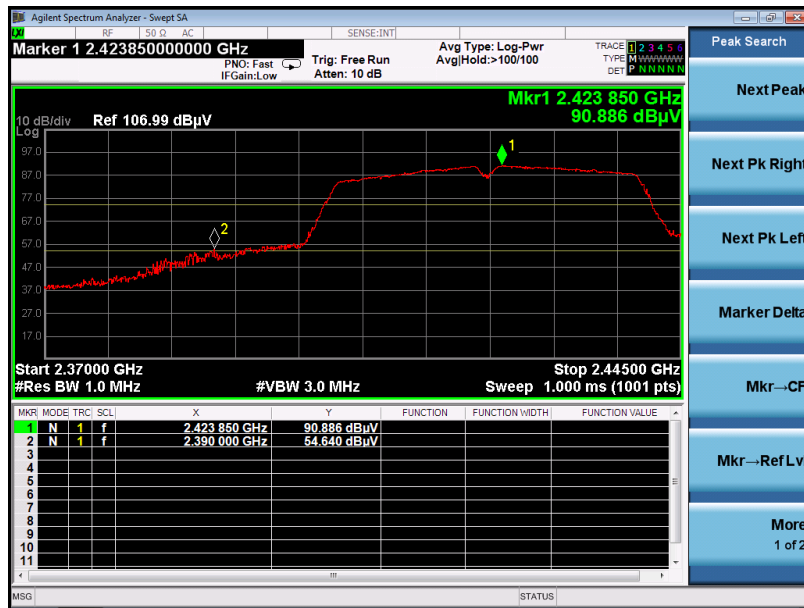


AV

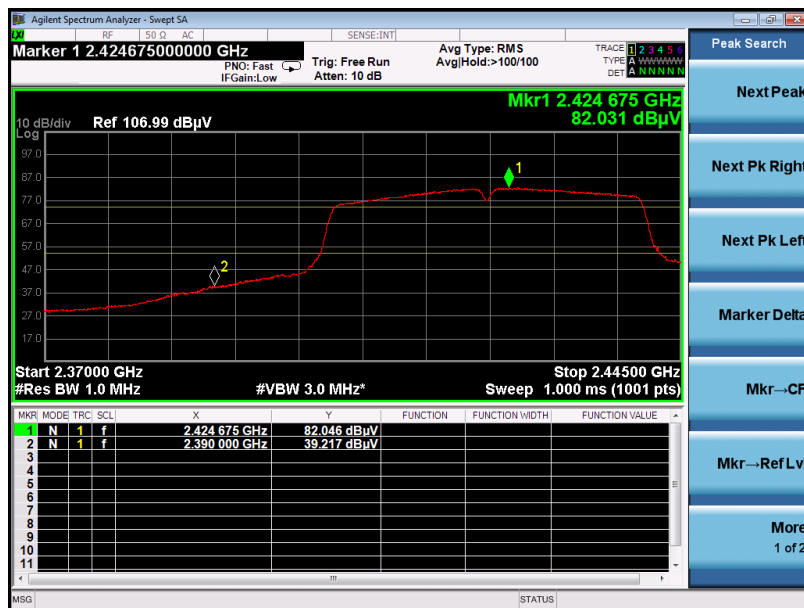


EUT	Linkit BLE- WiFi Gateway	Model Name	WB10PE
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n 40 with data rate 6.5 2422MHZ	Antenna	Vertical

PK



AV



EUT	Linkit BLE- WiFi Gateway	Model Name	WB10PE
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n 40with data rate 6.5 2452MHZ	Antenna	Horizontal

PK



AV



EUT	Linkit BLE- WiFi Gateway	Model Name	WB10PE
Temperature	25°C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n 40 with data rate 6.5 2452MHZ	Antenna	Vertical

PK



AV



RESULT: PASS

13. FCC LINE CONDUCTED EMISSION TEST

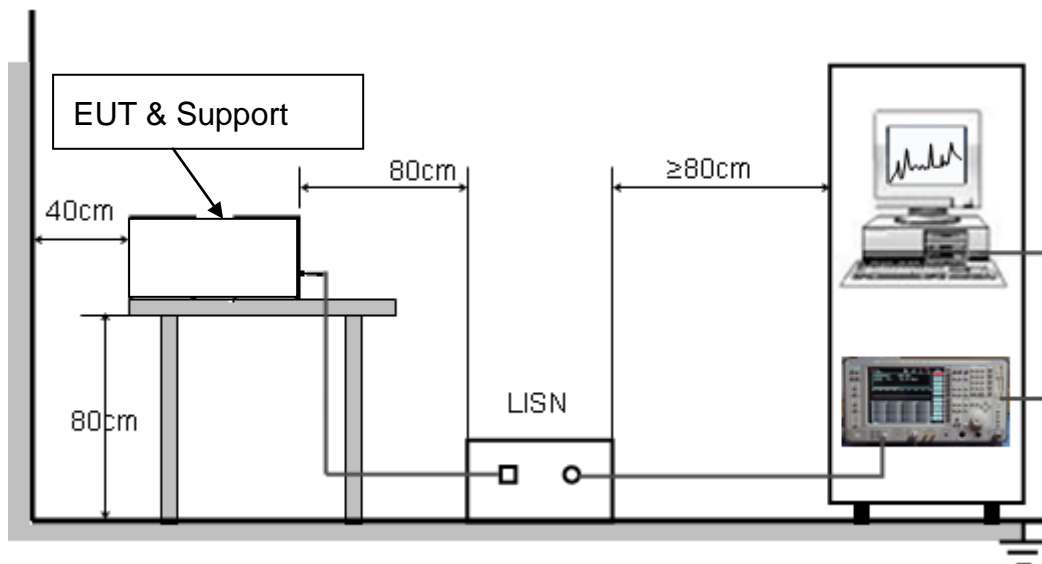
13.1. LIMITS OF LINE CONDUCTED EMISSION TEST

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 0.50 MHz.

13.2. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST



13.3. 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 120V/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.

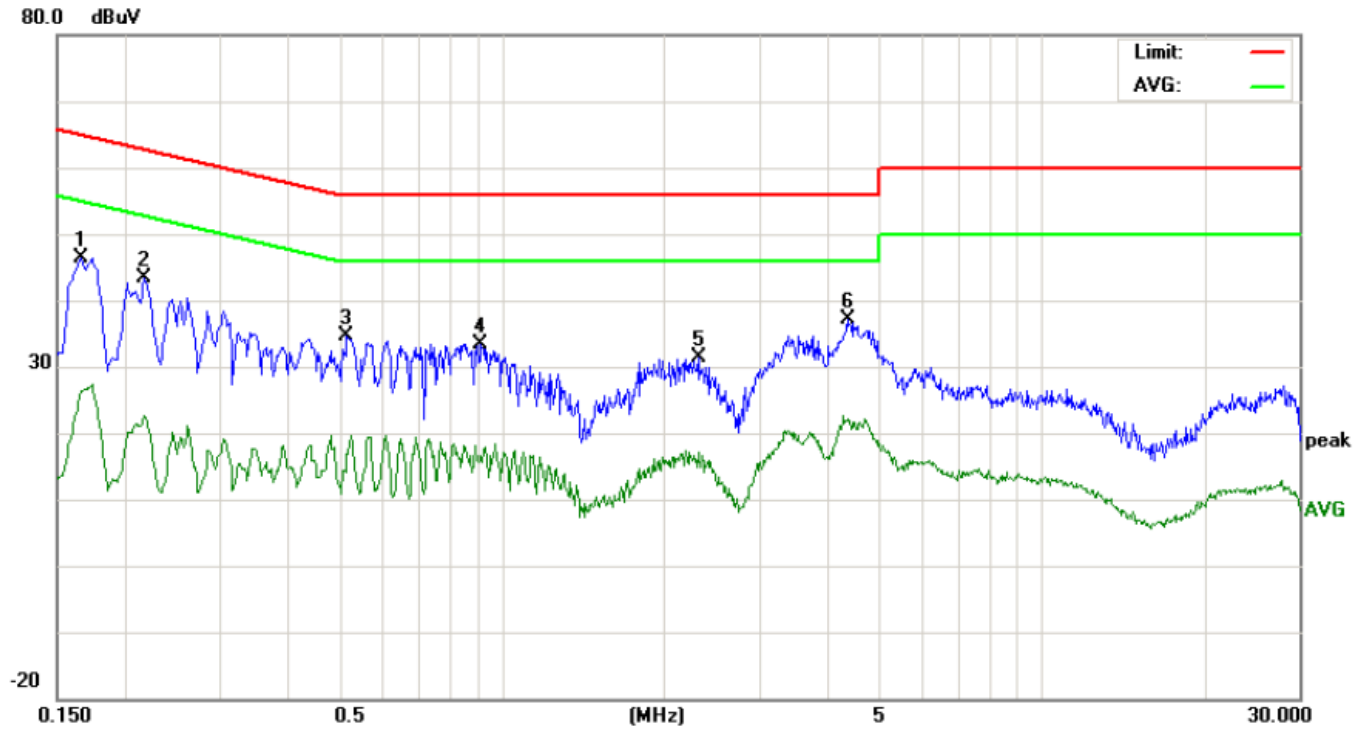
Then, the EUT configuration and cable configuration of the above highest emission level were recorded for reference of final testing.

13.4. 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.

13.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST

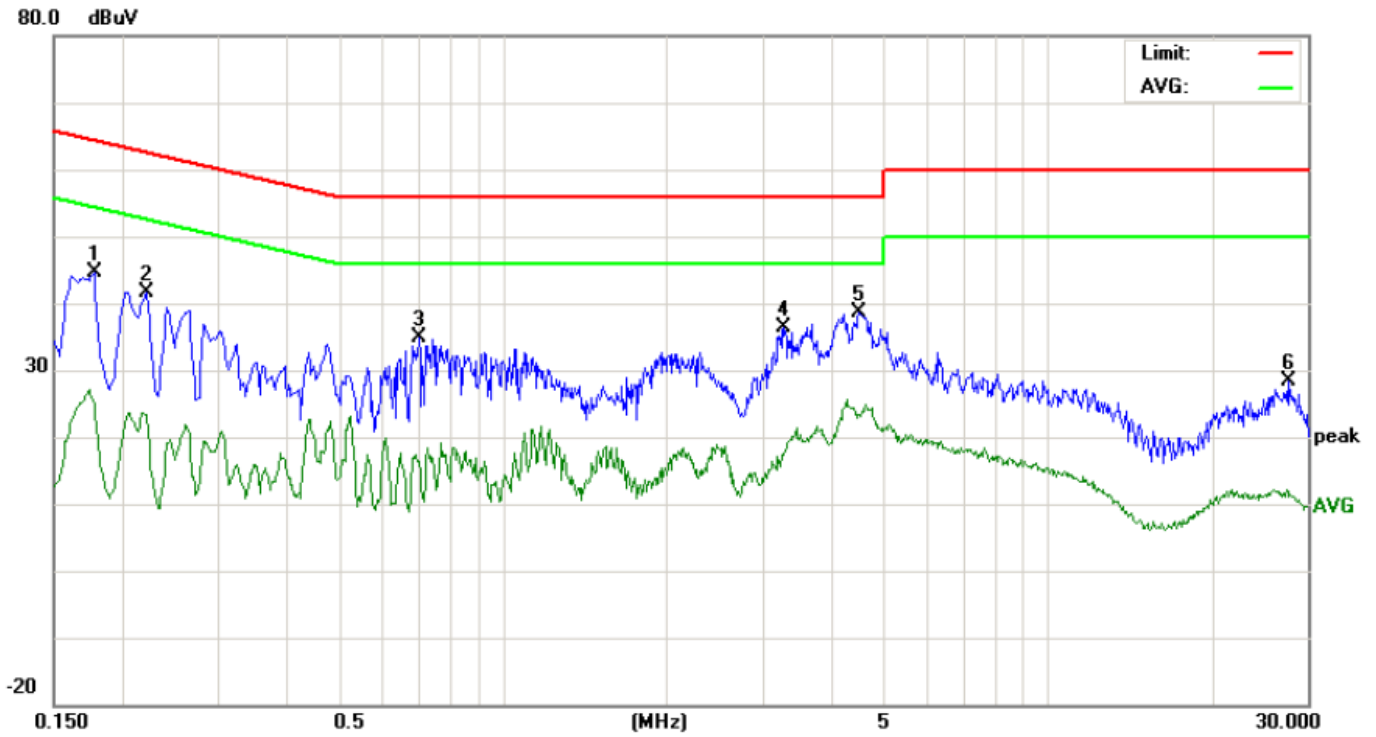
Line Conducted Emission Test Line 1-L



No.	Freq. (MHz)	Reading_Level (dBuV)			Correct Factor (dB)	Measurement (dBuV)			Limit (dBuV)		Margin (dB)		P/F	Comment
		Peak	QP	AVG		Peak	QP	AVG	QP	AVG	QP	AVG		
1	0.1660	36.20		16.16	10.18	46.38		26.34	65.15	55.15	-18.77	-28.81	P	
2	0.2180	33.27		12.48	10.23	43.50		22.71	62.89	52.89	-19.39	-30.18	P	
3	0.5180	24.19		6.46	10.38	34.57		16.84	56.00	46.00	-21.43	-29.16	P	
4	0.9140	22.94		6.25	10.40	33.34		16.65	56.00	46.00	-22.66	-29.35	P	
5	2.3179	21.15		6.73	10.35	31.50		17.08	56.00	46.00	-24.50	-28.92	P	
6	4.3780	26.94		11.87	10.26	37.20		22.13	56.00	46.00	-18.80	-23.87	P	

RESULT: PASS

Line Conducted Emission Test Line 2-N



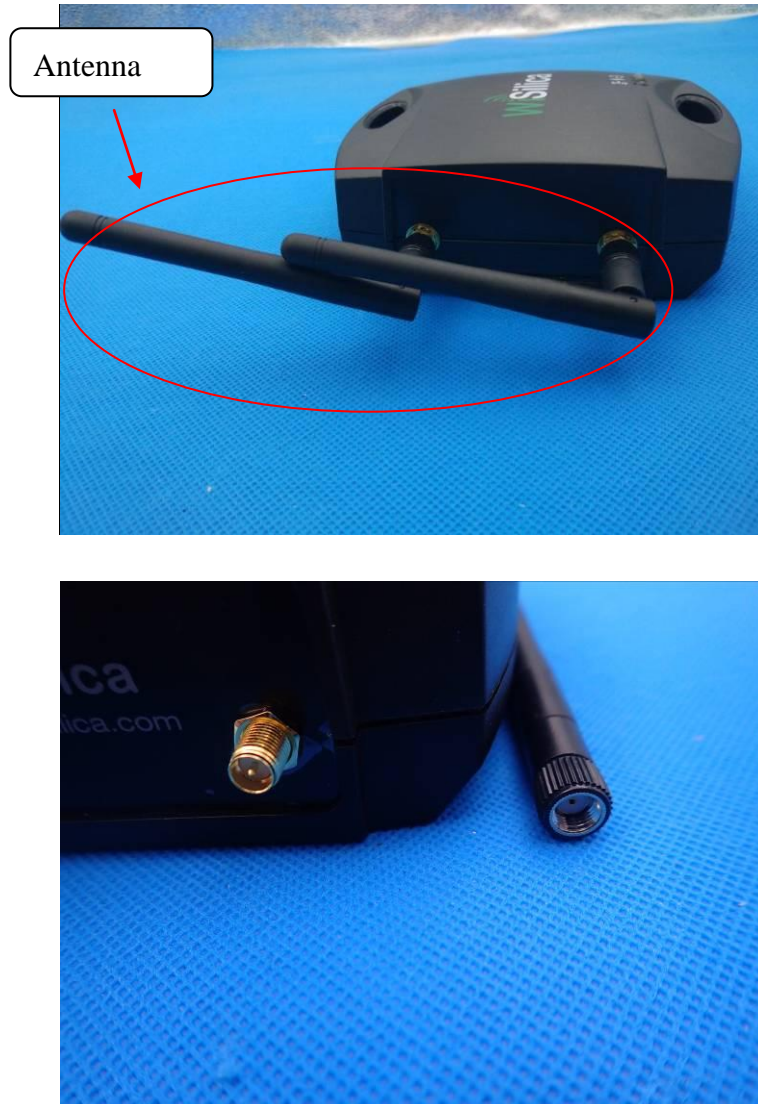
No.	Freq. (MHz)	Reading_Level (dBuV)			Correct Factor (dB)	Measurement (dBuV)			Limit (dBuV)		Margin (dB)		P/F	Comment
		Peak	QP	AVG		Peak	QP	AVG	QP	AVG	QP	AVG		
1	0.1780	34.40		14.75	10.19	44.59		24.94	64.57	54.57	-19.98	-29.63	P	
2	0.2220	31.31		13.11	10.24	41.55		23.35	62.74	52.74	-21.19	-29.39	P	
3	0.7019	24.45		5.94	10.35	34.80		16.29	56.00	46.00	-21.20	-29.71	P	
4	3.2820	25.78		6.92	10.53	36.31		17.45	56.00	46.00	-19.69	-28.55	P	
5	4.5020	28.30		13.07	10.21	38.51		23.28	56.00	46.00	-17.49	-22.72	P	
6	27.5740	18.24		1.67	10.13	28.37		11.80	60.00	50.00	-31.63	-38.20	P	

RESULT: PASS

14. ANTENNA REQUIREMENT

According to §15.203, 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 EuT has external antenna, which accordance to the above sections, is considered sufficient to comply with the provisions of these sections. Please see EuT photo for details.



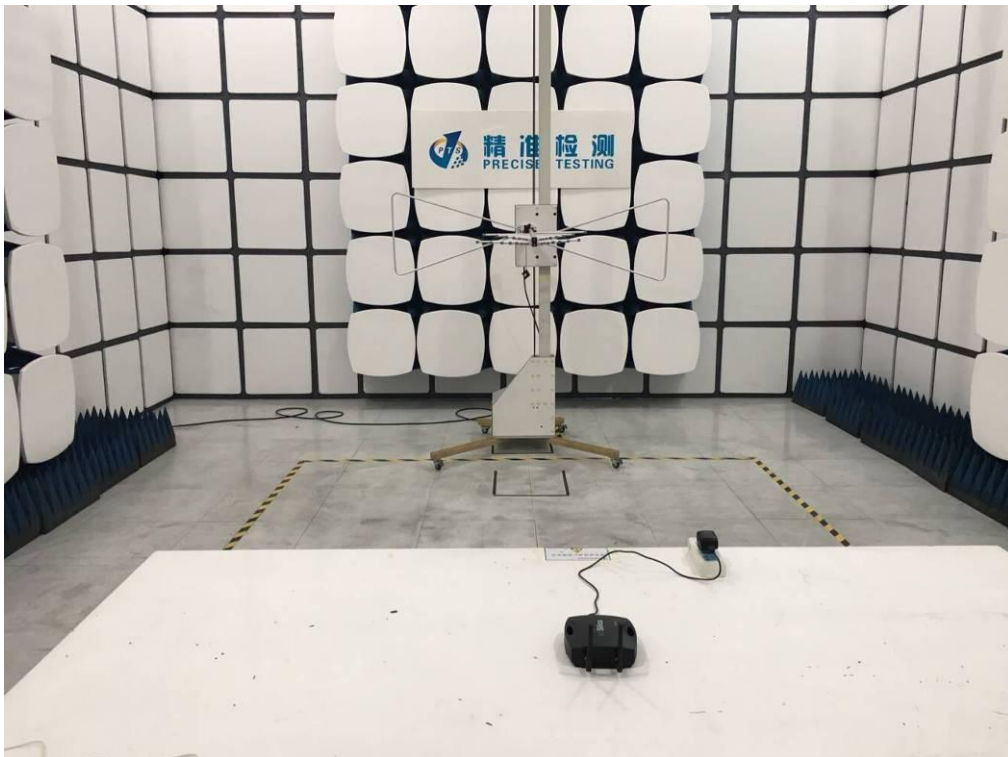
The requirements of section 15.203 are **FULFILLED**.

APPENDIX A: PHOTOGRAPHS OF TEST SETUP

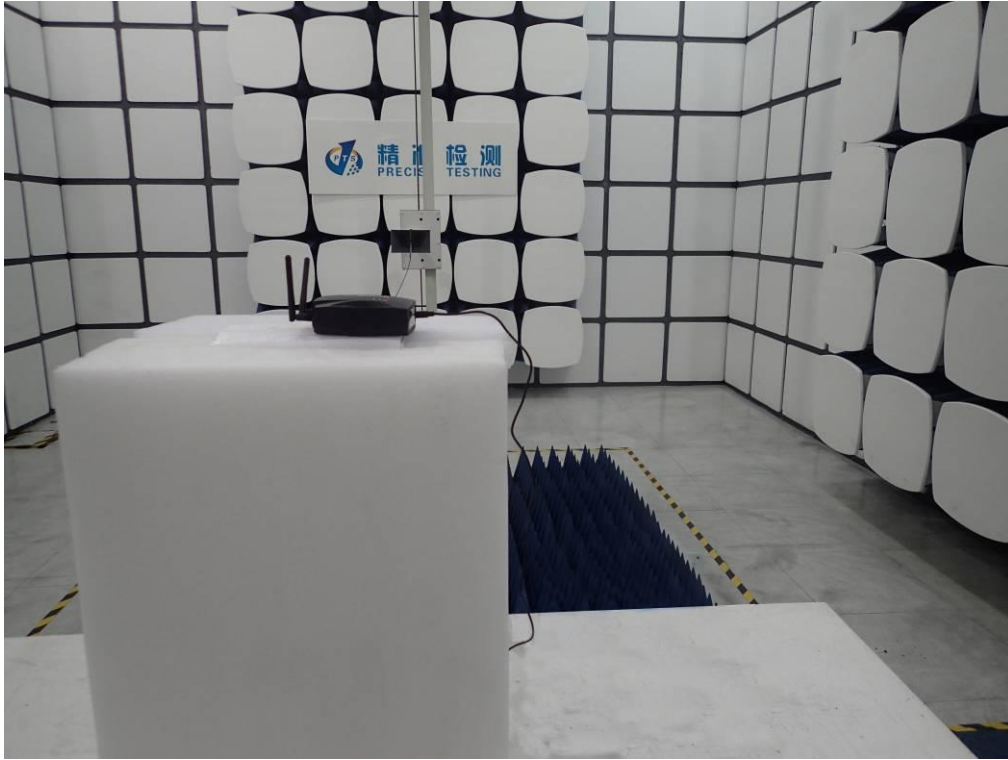
FCC LINE CONDUCTED EMISSION TEST SETUP



FCC RADIATED EMISSION TEST SETUP BELOW 1GHZ



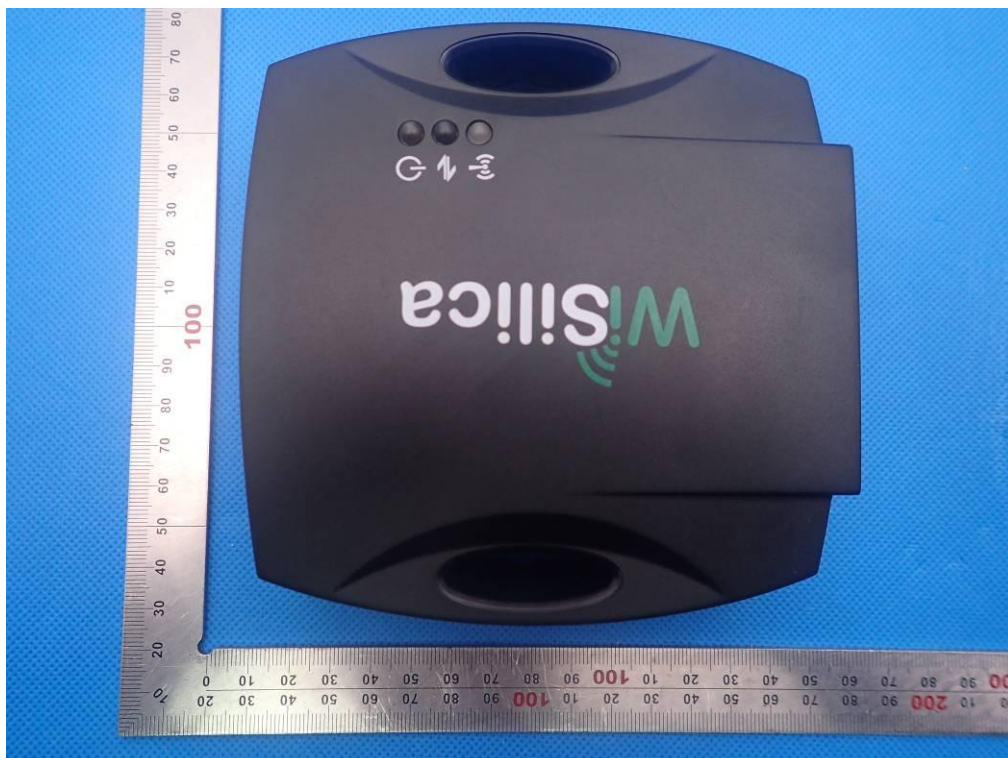
FCC RADIATED EMISSION TEST SETUP ABOVE 1GHZ



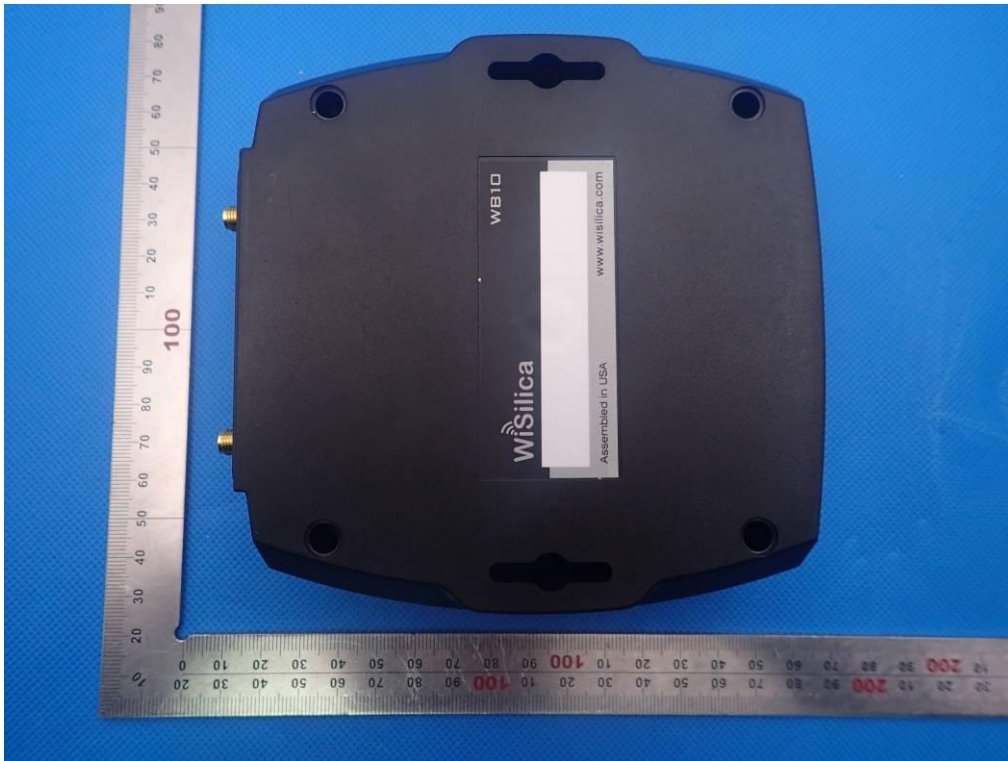
APPENDIX B: PHOTOGRAPHS OF EUT
ALL VIEW OF EUT



TOP VIEW OF EUT



BOTTOM VIEW OF EUT



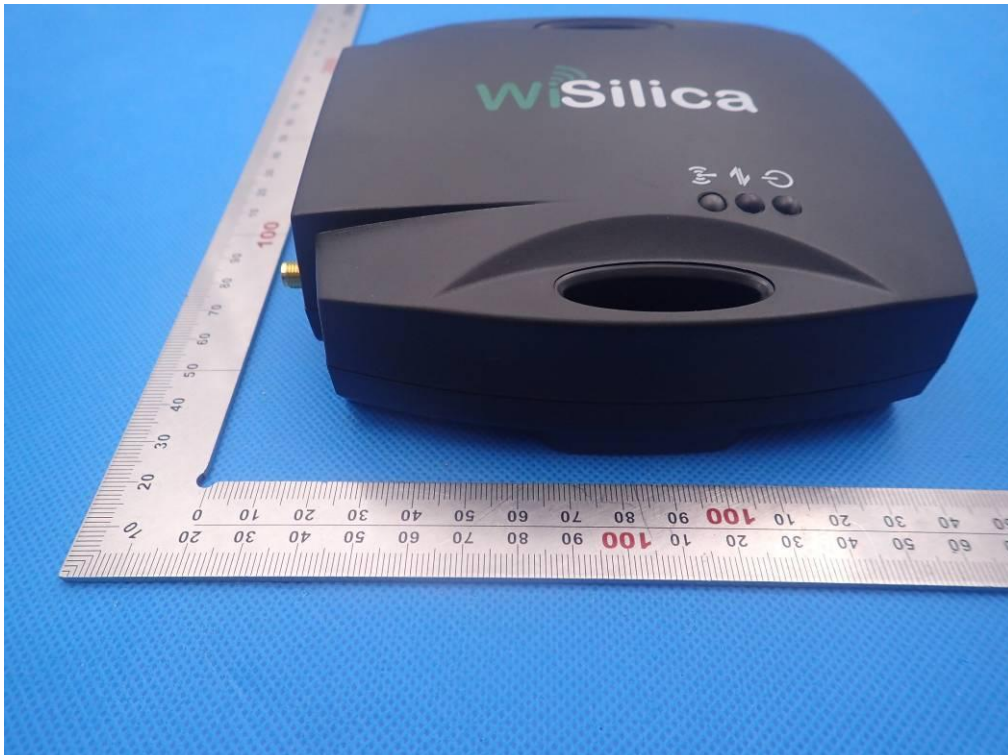
FRONT VIEW OF EUT



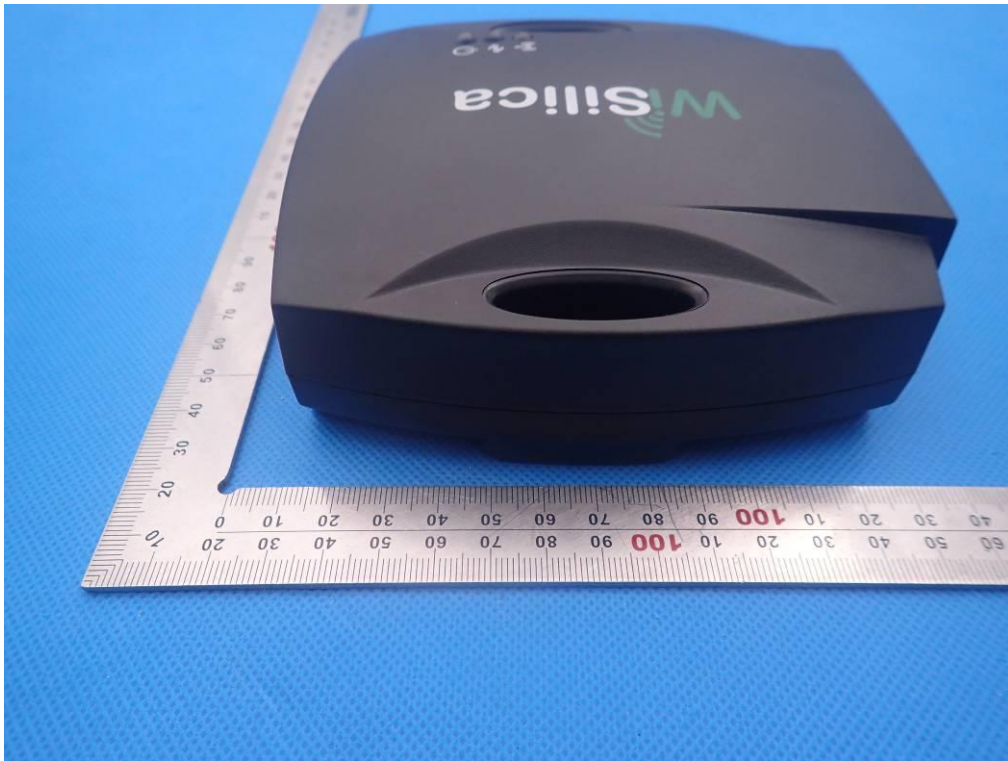
BACK VIEW OF EUT



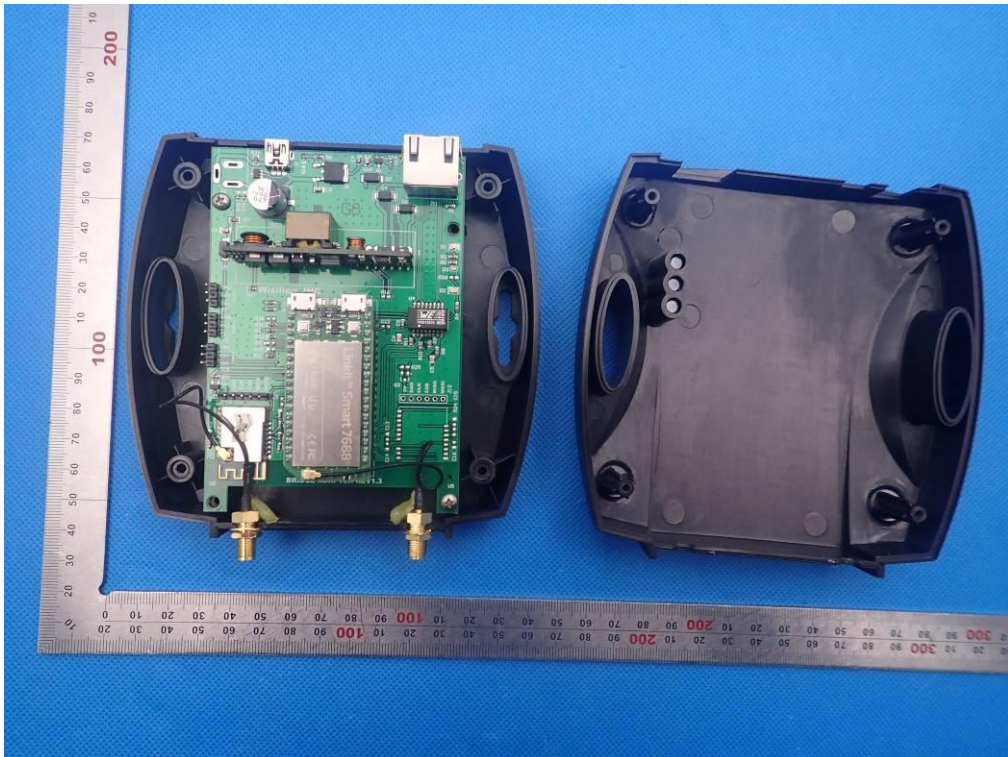
LEFT VIEW OF EUT



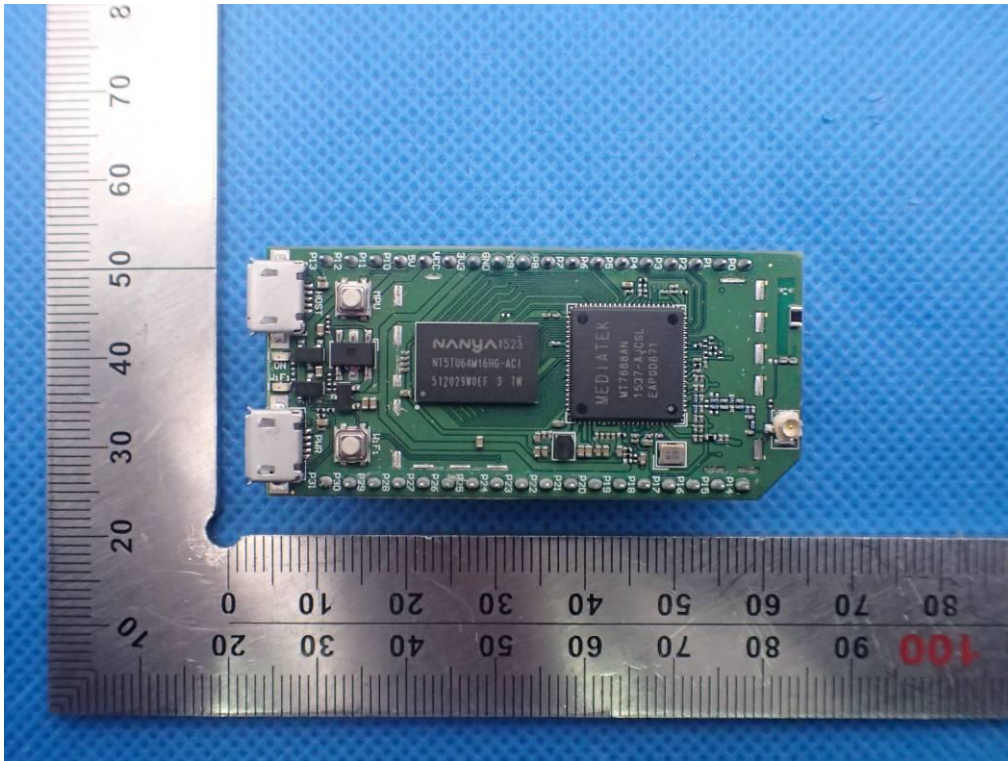
RIGHT VIEW OF EUT



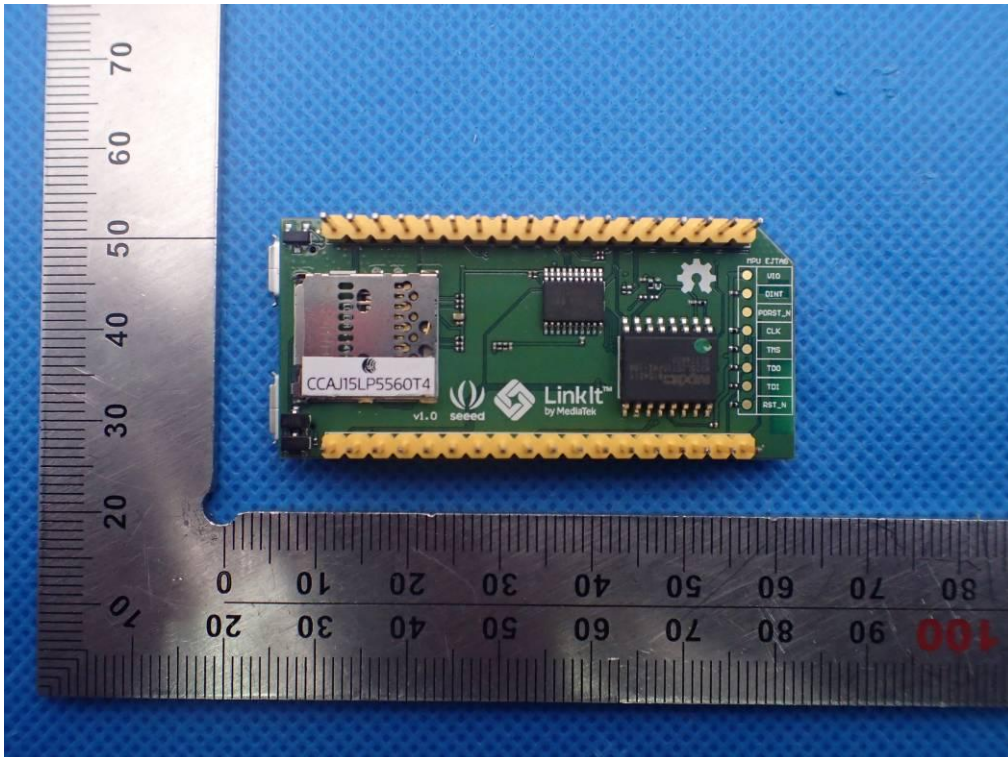
OPEN VIEW OF EUT



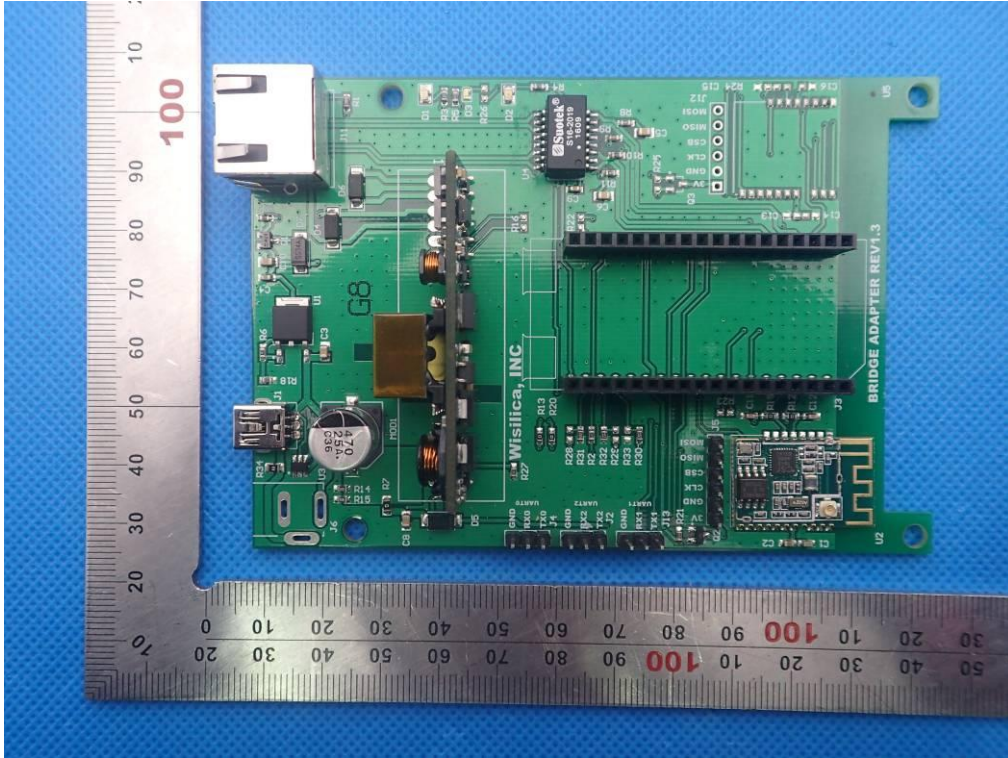
INTERNAL VIEW OF EUT-1



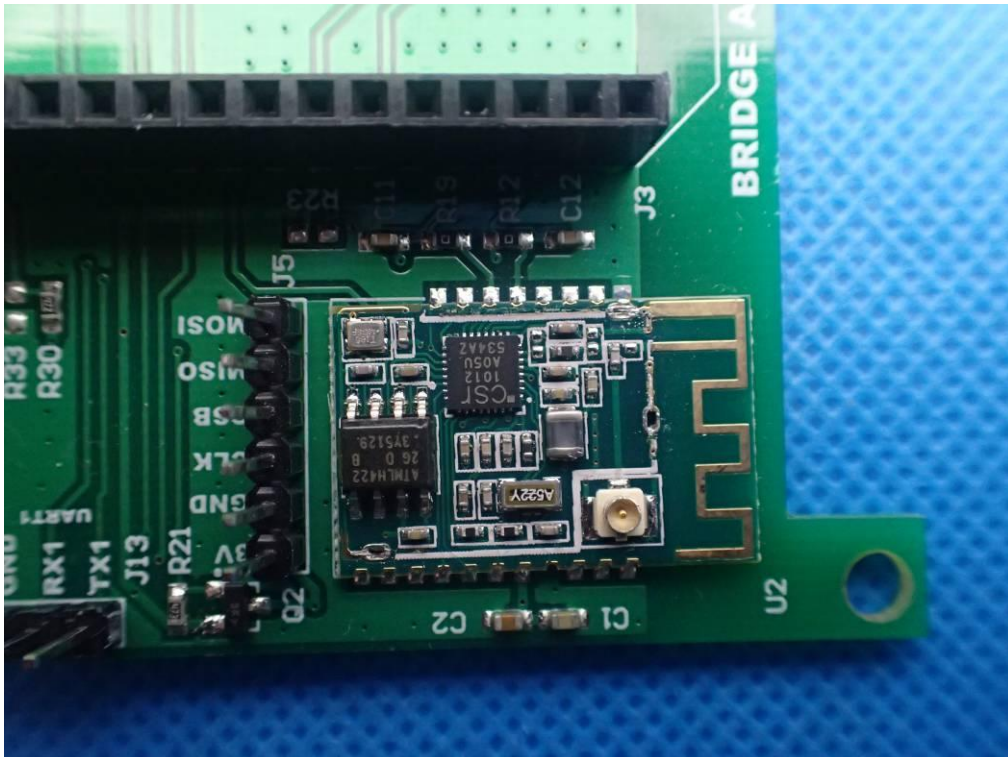
INTERNAL VIEW OF EUT-2



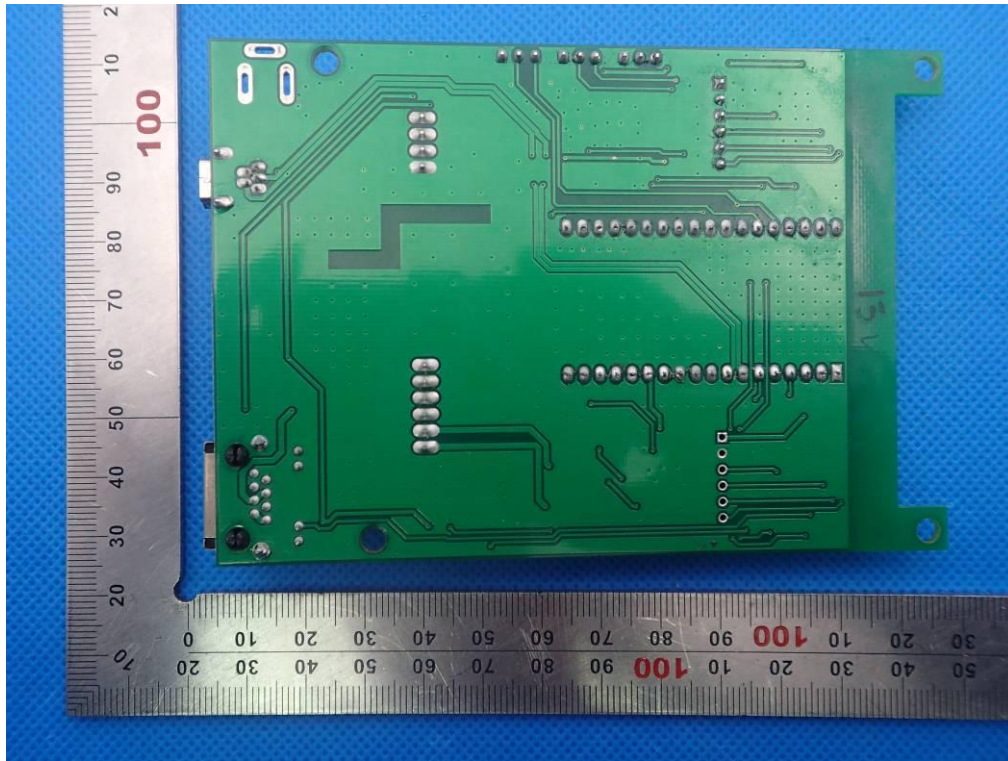
INTERNAL VIEW OF EUT-3



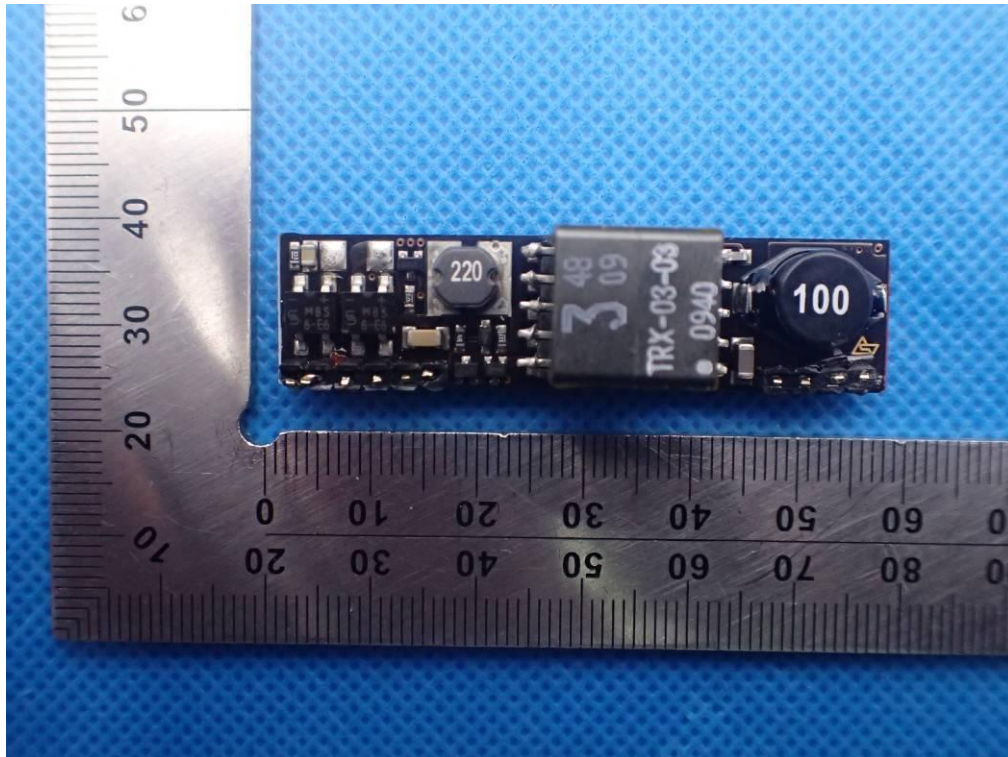
INTERNAL VIEW OF EUT-4



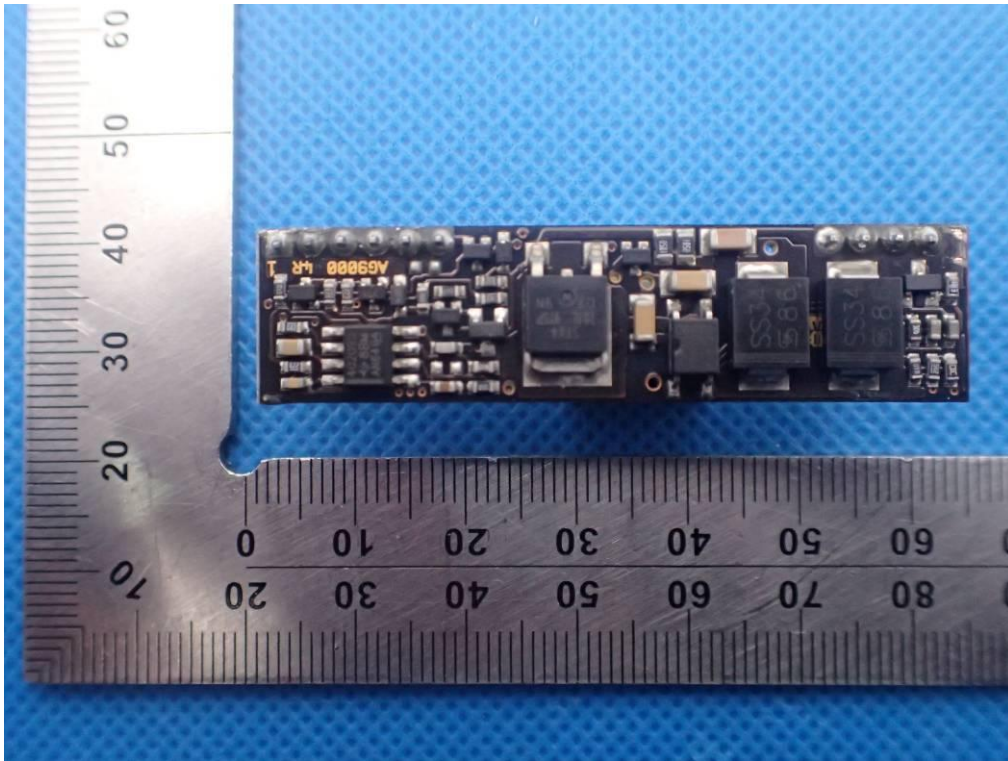
INTERNAL VIEW OF EUT-5



INTERNAL VIEW OF EUT-6



INTERNAL VIEW OF EUT-7



----END OF REPORT----