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# FCC Test Report

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Report No.: AGC07592190701FE02

**FCC ID** : XBE-BLE2LIN

**APPLICATION PURPOSE** : Class II Equipment

**PRODUCT DESIGNATION** : Bluetooth® Adapter

**BRAND NAME** : LINAK

**MODEL NAME** : BLE2LIN

**APPLICANT** : LINAK A/S

**DATE OF ISSUE** : Aug. 07, 2019

**STANDARD(S)** : FCC Part 15.247

**REPORT VERSION** : V1.0

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

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### REPORT REVISE RECORD

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Aug. 07, 2019	Valid	Initial Release



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## TABLE OF CONTENTS

<b>1. VERIFICATION OF COMPLIANCE</b>	<b>4</b>
<b>2. GENERAL INFORMATION</b>	<b>5</b>
2.1 PRODUCT DESCRIPTION	5
2.2. TABLE OF CARRIER FREQUENCIES	5
2.3 RELATED SUBMITTAL(S)/GRANT(S)	6
2.4 TEST METHODOLOGY	6
2.5 SPECIAL ACCESSORIES	6
2.6 EQUIPMENT MODIFICATIONS	6
<b>3. MEASUREMENT UNCERTAINTY</b>	<b>7</b>
<b>4. DESCRIPTION OF TEST MODES</b>	<b>8</b>
<b>5. SYSTEM TEST CONFIGURATION</b>	<b>9</b>
5.1 CONFIGURATION OF TESTED SYSTEM	9
5.2 EQUIPMENT USED IN TESTED SYSTEM	9
5.3. SUMMARY OF TEST RESULTS	9
<b>6. TEST FACILITY</b>	<b>10</b>
<b>7. RADIATED EMISSION</b>	<b>11</b>
7.1. MEASUREMENT PROCEDURE	11
7.2. TEST SETUP	12
7.3. LIMITS AND MEASUREMENT RESULT	13
7.4. TEST RESULT	13
<b>8. FCC LINE CONDUCTED EMISSION TEST</b>	<b>23</b>
8.1. LIMITS OF LINE CONDUCTED EMISSION TEST	23
8.2. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST	23
8.3. PRELIMINARY PROCEDURE OF LINE CONDUCTED EMISSION TEST	24
8.4. FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST	24
8.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST	25
<b>APPENDIX A: PHOTOGRAPHS OF TEST SETUP</b>	<b>27</b>
<b>APPENDIX B: PHOTOGRAPHS OF EUT</b>	<b>29</b>

## 1. VERIFICATION OF COMPLIANCE

<b>Applicant</b>	LINAK A/S
<b>Address</b>	Smedevaenget 8, Guderup, Deskline 6430, Nordborg, Denmark
<b>Manufacturer</b>	LINAK A/S
<b>Address</b>	Smedevaenget 8, Guderup, Deskline 6430, Nordborg, Denmark
<b>Factory</b>	SVI Public company Limited
<b>Address</b>	141-142 Moo.5. Tiwanon Rd., Bangkadi, Muang, Pathumthani 12000 Thailand
<b>Product Designation</b>	Bluetooth® Adapter
<b>Brand Name</b>	LINAK
<b>Test Model</b>	BLE2LIN
<b>Date of test</b>	Jul. 23, 2019 to Aug. 06, 2019
<b>Deviation</b>	None
<b>Condition of Test Sample</b>	Normal
<b>Test Result</b>	Pass
<b>Report Template</b>	AGCRT-US-BLE/RF

We hereby certify that:

The above equipment was tested by Attestation of Global Compliance (Shenzhen) Co., Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with radiated emission limits of FCC part 15.247.

Prepared By sky dong  
Sky Dong  
(Project Engineer) Aug. 07, 2019

Reviewed By Max Zhang  
Max Zhang  
(Reviewer) Aug. 07, 2019

Approved By Forrest Lei  
Forrest Lei  
(Authorized Officer) Aug. 07, 2019



## 2.GENERAL INFORMATION

### 2.1PRODUCT DESCRIPTION

The EUT is designed as a “Bluetooth® Adapter”. It is designed by way of utilizing the GFSK technology to achieve the system operation.

A major technical description of EUT is described as following

Operation Frequency	2.402 GHz to 2.480GHz
RF Output Power	-4.746dBm(Max)
Bluetooth Version	V 4.2
Modulation	BR <input type="checkbox"/> GFSK, EDR <input type="checkbox"/> $\pi$ /4-DQPSK, <input type="checkbox"/> 8DPSK BLE <input checked="" type="checkbox"/> GFSK 1Mbps <input type="checkbox"/> GFSK 2Mbps
Number of channels	40 Channel
Antenna Designation	Chip Antenna(Comply with requirements of the FCC part 15.203)
Antenna Gain	1.7dBi
Hardware Version	10MSMDBLE2LIN001-D-1
Software Version	SW0077086 (firmware:SW03200002V1-00 )
Power Supply	DC 9V by controller

### 2.2. TABLE OF CARRIER FREQUENCIES

Frequency Band	Channel Number	Frequency
2400~2483.5MHZ	0	2402MHZ
	1	2404MHZ
	:	:
	38	2478 MHZ
	39	2480 MHZ

### 2.3 RELATED SUBMITTAL(S)/GRANT(S)

This submittal(s) (test report) is intended for **FCC ID: XBE-BLE2LIN** filing to comply with the FCC Part 15.247 requirements.

### 2.4 TEST METHODOLOGY

Both conducted and radiated testing was performed according to the procedures in ANSI C63.10 (2013). Radiated testing was performed at an antenna to EUT distance 3 meters.

### 2.5 SPECIAL ACCESSORIES

Refer to section 2.2.

### 2.6 EQUIPMENT MODIFICATIONS

Not available for this EUT intended for grant.



### 3. MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement  $y \pm U$ , where expanded uncertainty  $U$  is based on a standard uncertainty multiplied by a coverage factor of  $k=2$ , providing a level of confidence of approximately 95%.

- Uncertainty of Conducted Emission,  $U_c = \pm 3.2$  dB
- Uncertainty of Radiated Emission below 1GHz,  $U_c = \pm 3.9$  dB
- Uncertainty of Radiated Emission above 1GHz,  $U_c = \pm 4.8$  dB
- Uncertainty of total RF power, conducted,  $U_c = \pm 0.8$  dB
- Uncertainty of RF power density, conducted,  $U_c = \pm 2.6$  dB
- Uncertainty of spurious emissions, conducted,  $U_c = \pm 2.7$  dB
- Uncertainty of Occupied Channel Bandwidth:  $U_c = \pm 2$  %



#### 4. DESCRIPTION OF TEST MODES

NO.	TEST MODE DESCRIPTION
1	Low channel TX
2	Middle channel TX
3	High channel TX

Note:

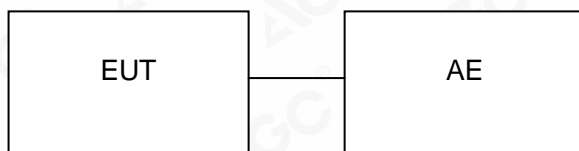
1. Only the result of the worst case was recorded in the report, if no other cases.
2. For Radiated Emission, 3axis were chosen for testing for each applicable mode.
3. The test use engineering mode which can set the EUT into the individual test modes.





## 5. SYSTEM TEST CONFIGURATION

### 5.1 CONFIGURATION OF TESTED SYSTEM



### 5.2 EQUIPMENT USED IN TESTED SYSTEM

Item	Equipment	Model No.	ID or Specification	Remark
1	Bluetooth® Adapter	BLE2LIN	XBE-BLE2LIN	EUT
2	Adapter	ASW055229020002B (SMPS006)	100-240VAC/Vout 29VDC	AE
3	Controller	ASW066	DC 9V	AE

### 5.3. SUMMARY OF TEST RESULTS

FCC RULES	DESCRIPTION OF TEST	RESULT
15.209	Radiated Emission	Compliant
15.207	Conducted Emission	Compliant

Note:

The difference between the original device and Class II device is as follow:  
A DC to DC converter has been replaced together with a few resistors. The Bluetooth part remains the same.  
So the Conducted Emission and Radiated Emission had been tested for the Class II device.

## 6. TEST FACILITY

<b>Test Site</b>	Attestation of Global Compliance (Shenzhen) Co., Ltd
<b>Location</b>	1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China
<b>Designation Number</b>	CN1259
<b>FCC Test Firm Registration Number</b>	975832
<b>A2LA Cert. No.</b>	5054.02
<b>Description</b>	Attestation of Global Compliance(Shenzhen) Co., Ltd is accredited by A2LA

### TEST EQUIPMENT OF CONDUCTED EMISSION TEST

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	ESPI	101206	Jun. 12, 2019	Jun. 11, 2020
LISN	R&S	ESH2-Z5	100086	Aug. 28, 2018	Aug. 27, 2019

### TEST EQUIPMENT OF RADIATED EMISSION TEST

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	ESCI	10096	Jun. 12, 2019	Jun. 11, 2020
EXA Signal Analyzer	Aglient	N9010A	MY53470504	Dec. 20, 2018	Dec. 19, 2019
2.4GHz Fliter	EM Electronics	2400-2500MHz	N/A	Feb. 27, 2019	Feb. 26, 2020
Attenuator	ZHINAN	E-002	N/A	Aug. 28, 2018	Aug. 27, 2019
Horn antenna	SCHWARZBECK	BBHA 9170	#768	Sep. 21, 2017	Sep. 20, 2020
Active loop antenna (9K-30MHz)	ZHINAN	ZN30900C	18051	Jun. 14, 2018	Jun. 13, 2020
Double-Ridged Waveguide Horn	ETS LINDGREN	3117	00034609	May. 26, 2018	May. 25, 2020
Broadband Preamplifier	ETS LINDGREN	3117PA	00225134	Oct. 25, 2018	Oct. 24, 2019
ANTENNA	SCHWARZBECK	VULB9168	D69250	Sep. 28, 2017	Sep. 27, 2019

## 7. RADIATED EMISSION

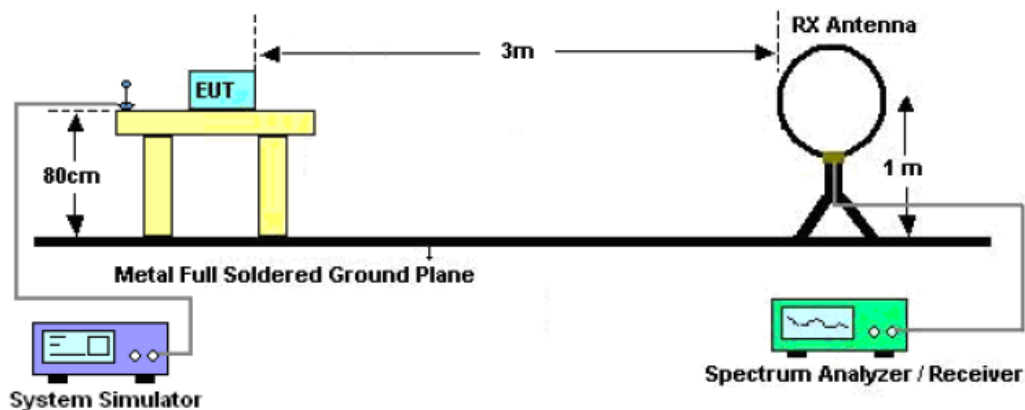
### 7.1. MEASUREMENT PROCEDURE

1. The EUT was placed on the top of the turntable 0.8 or 1.5 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
6. For emissions above 1GHz, use 1MHz RBW and 3MHz VBW for peak reading. 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.
7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum values.
8. If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High - Low scan is not required in this case.

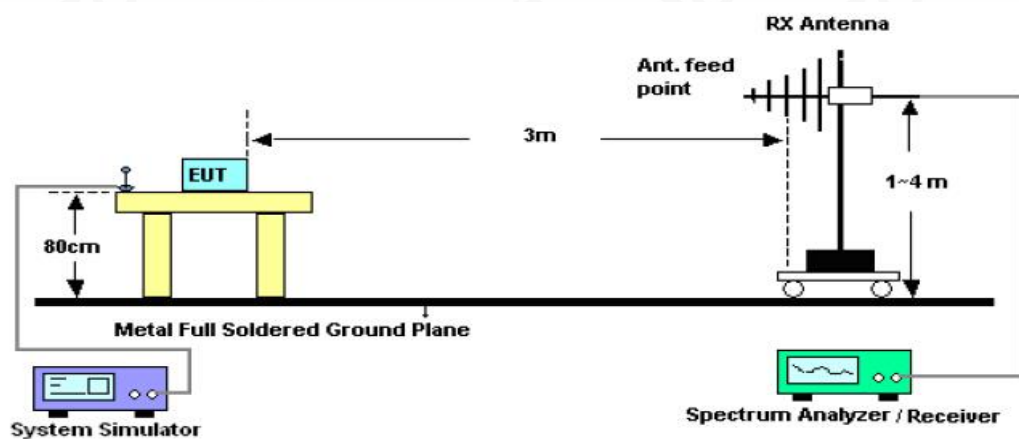


## 7.2. TEST SETUP

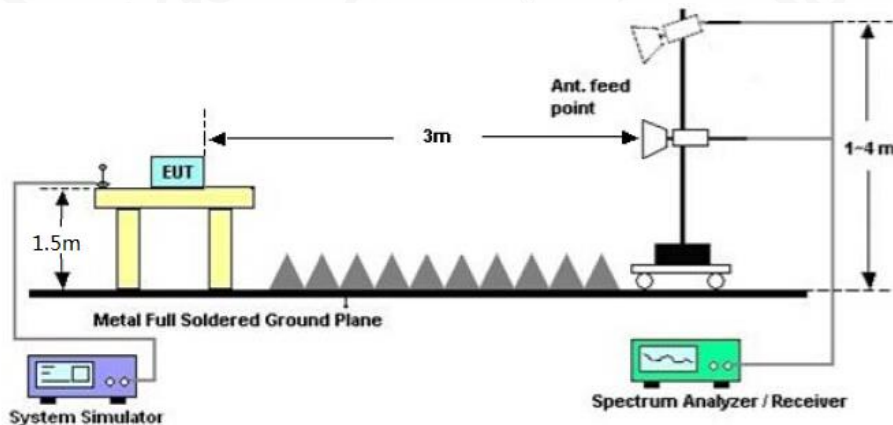
Radiated Emission Test-Setup Frequency Below 30MHz



RADIATED EMISSION TEST SETUP 30MHz-1000MHz



RADIATED EMISSION TEST SETUP ABOVE 1000MHz





### 7.3. LIMITS AND MEASUREMENT RESULT

15.209 Limit in the below table has to be followed

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

Note: All modes were tested For restricted band radiated emission,  
the test records reported below are the worst result compared to other modes.

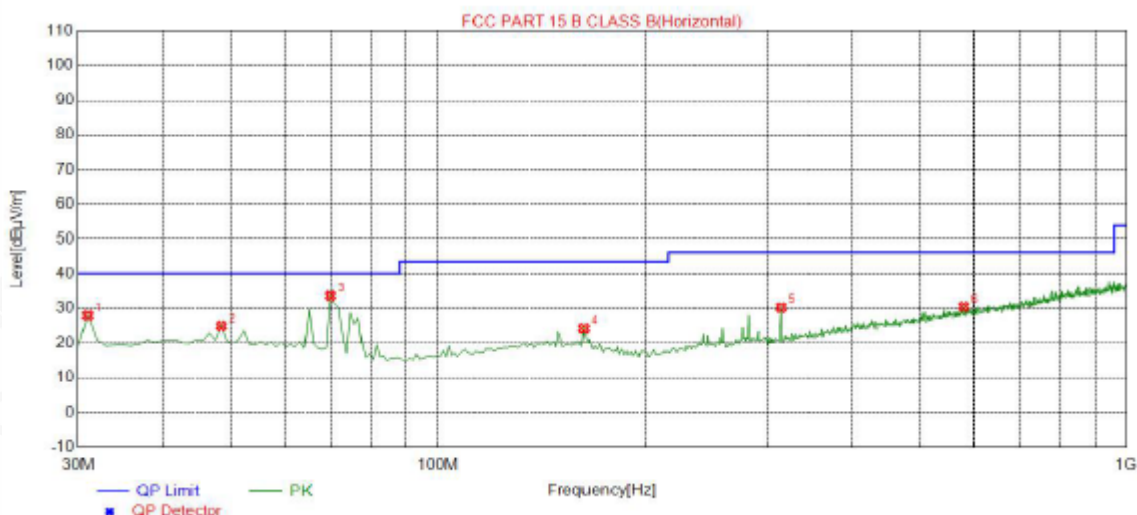
### 7.4. TEST RESULT

#### RADIATED EMISSION BELOW 30MHZ

No emission found between lowest internal used/generated frequencies to 30MHz.

### RADIATED EMISSION BELOW 1GHZ

EUT	Bluetooth® Adapter	Model Name	BLE2LIN
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Horizontal



NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	30.9700	27.99	13.02	40.00	12.01	100	160	Horizontal
2	48.4300	24.96	14.71	40.00	15.04	100	85	Horizontal
3	69.7700	33.67	12.26	40.00	6.33	100	160	Horizontal
4	162.890	24.20	14.65	43.50	19.30	100	360	Horizontal
5	315.180	30.25	16.48	46.00	15.75	100	287	Horizontal
6	580.960	30.49	23.93	46.00	15.51	100	360	Horizontal

RESULT: PASS



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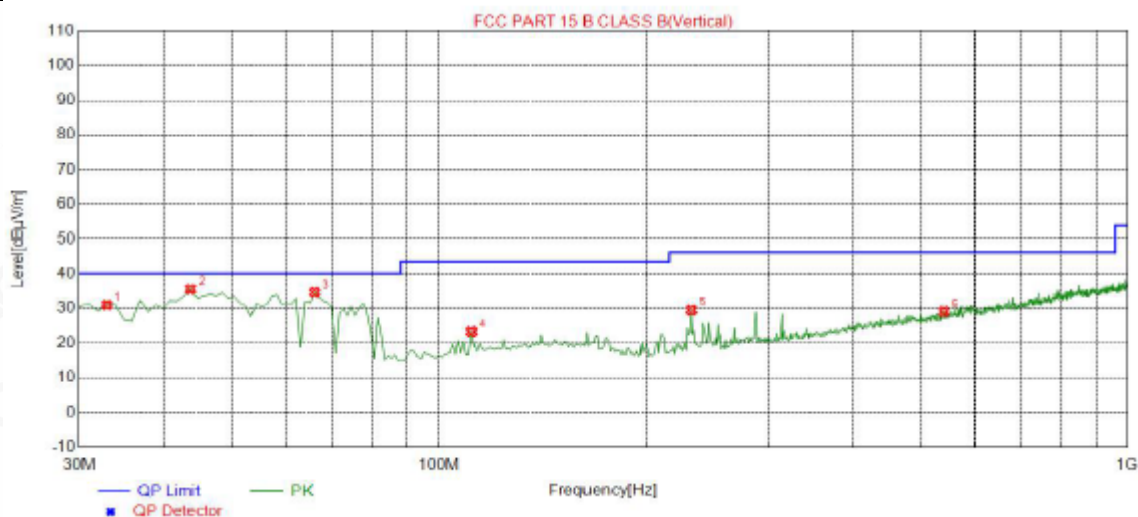
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EUT	Bluetooth® Adapter	Model Name	BLE2LIN
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Vertical



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	32.9100	30.97	13.36	40.00	9.03	100	140	Vertical
2	43.5800	35.55	14.84	40.00	4.45	100	6	Vertical
3	65.8900	34.61	12.93	40.00	5.39	100	0	Vertical
4	111.480	23.30	12.58	43.50	20.20	100	122	Vertical
5	232.730	29.46	14.25	46.00	16.54	100	75	Vertical
6	541.190	29.10	23.08	46.00	16.90	100	331	Vertical

## RESULT: PASS

### Note:

- Factor=Antenna Factor + Cable loss, Margin=Measurement-Limit.
- All test modes had been tested. The mode 1 is the worst case and recorded in the report.

### RADIATED EMISSION ABOVE 1GHZ

<b>EUT</b>	Bluetooth® Adapter	<b>Model Name</b>	BLE2LIN
<b>Temperature</b>	25° C	<b>Relative Humidity</b>	55.4%
<b>Pressure</b>	960hPa	<b>Test Voltage</b>	Normal Voltage
<b>Test Mode</b>	Mode 1	<b>Antenna</b>	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4804.000	45.91	0.08	45.99	74	-28.01	peak
4804.000	39.34	0.08	39.42	54	-14.58	AVG
7206.000	41.18	2.21	43.39	74	-30.61	peak
7206.000	35.34	2.21	37.55	54	-16.45	AVG

Remark:

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

<b>EUT</b>	Bluetooth® Adapter	<b>Model Name</b>	BLE2LIN
<b>Temperature</b>	25° C	<b>Relative Humidity</b>	55.4%
<b>Pressure</b>	960hPa	<b>Test Voltage</b>	Normal Voltage
<b>Test Mode</b>	Mode 1	<b>Antenna</b>	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4804.000	44.45	0.08	44.53	74	-29.47	peak
4804.000	38.7	0.08	38.78	54	-15.22	AVG
7206.000	38.47	2.21	40.68	74	-33.32	peak
7206.000	32.46	2.21	34.67	54	-19.33	AVG

Remark:

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



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<b>EUT</b>	Bluetooth® Adapter	<b>Model Name</b>	BLE2LIN
<b>Temperature</b>	25° C	<b>Relative Humidity</b>	55.4%
<b>Pressure</b>	960hPa	<b>Test Voltage</b>	Normal Voltage
<b>Test Mode</b>	Mode 2	<b>Antenna</b>	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4880.000	44.87	0.14	45.01	74	-28.99	peak
4880.000	40.11	0.14	40.25	54	-13.75	AVG
7320.000	39.77	2.36	42.13	74	-31.87	peak
7320.000	33.16	2.36	35.52	54	-18.48	AVG

Remark:

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

<b>EUT</b>	Bluetooth® Adapter	<b>Model Name</b>	BLE2LIN
<b>Temperature</b>	25° C	<b>Relative Humidity</b>	55.4%
<b>Pressure</b>	960hPa	<b>Test Voltage</b>	Normal Voltage
<b>Test Mode</b>	Mode 2	<b>Antenna</b>	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4880.000	43.89	0.14	44.03	74	-29.97	peak
4880.000	37.37	0.14	37.51	54	-16.49	AVG
7320.000	39.16	2.36	41.52	74	-32.48	peak
7320.000	32.48	2.36	34.84	54	-19.16	AVG

Remark:

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

<b>EUT</b>	Bluetooth® Adapter	<b>Model Name</b>	BLE2LIN
<b>Temperature</b>	25° C	<b>Relative Humidity</b>	55.4%
<b>Pressure</b>	960hPa	<b>Test Voltage</b>	Normal Voltage
<b>Test Mode</b>	Mode 3	<b>Antenna</b>	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4960.000	44.17	0.22	44.39	74	-29.61	peak
4960.000	38.69	0.22	38.91	54	-15.09	AVG
7440.000	39.48	2.64	42.12	74	-31.88	peak
7440.000	33.49	2.64	36.13	54	-17.87	AVG

Remark:

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

<b>EUT</b>	Bluetooth® Adapter	<b>Model Name</b>	BLE2LIN
<b>Temperature</b>	25° C	<b>Relative Humidity</b>	55.4%
<b>Pressure</b>	960hPa	<b>Test Voltage</b>	Normal Voltage
<b>Test Mode</b>	Mode 3	<b>Antenna</b>	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4960.000	42.78	0.22	43	74	-31	peak
4960.000	37.04	0.22	37.26	54	-16.74	AVG
7440.000	37.85	2.64	40.49	74	-33.51	peak
7440.000	31.2	2.64	33.84	54	-20.16	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.

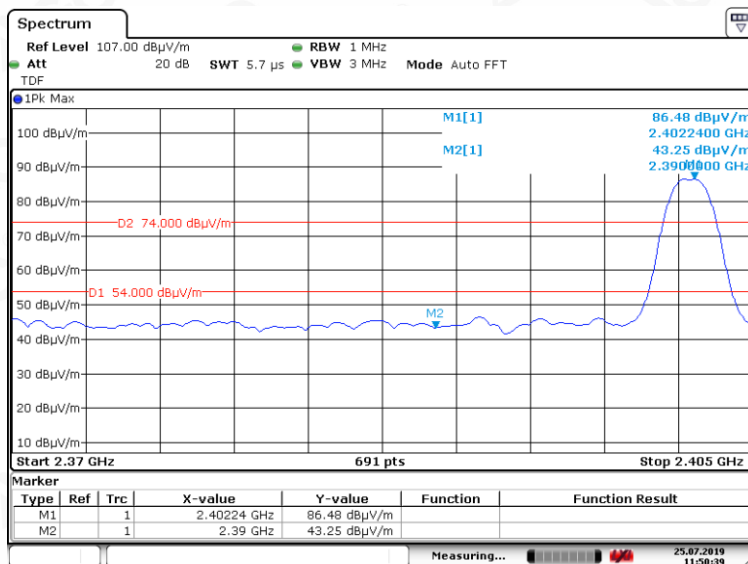
Factor = Antenna Factor + Cable loss - Amplifier gain, Over=Measure-Limit.

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

### TEST RESULT FOR RESTRICTED BANDS REQUIREMENTS

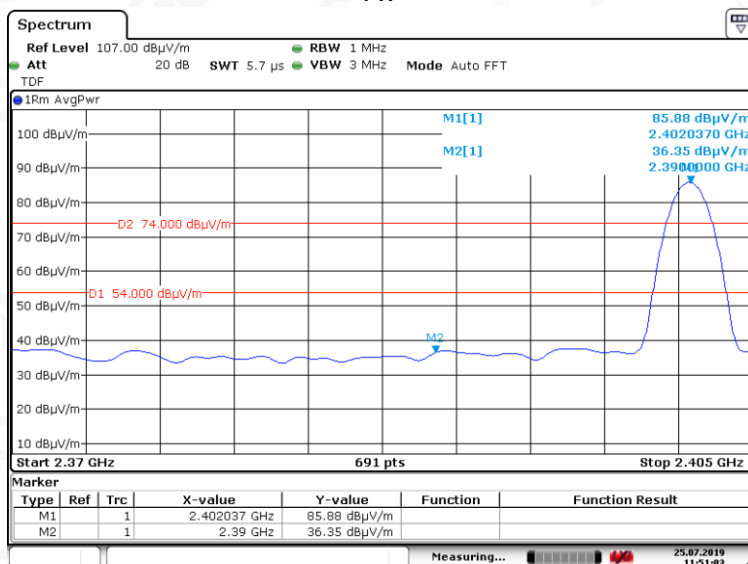
EUT	Bluetooth® Adapter	Model Name	BLE2LIN
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Horizontal

PK



Date: 25.JUL.2019 11:50:38

AV

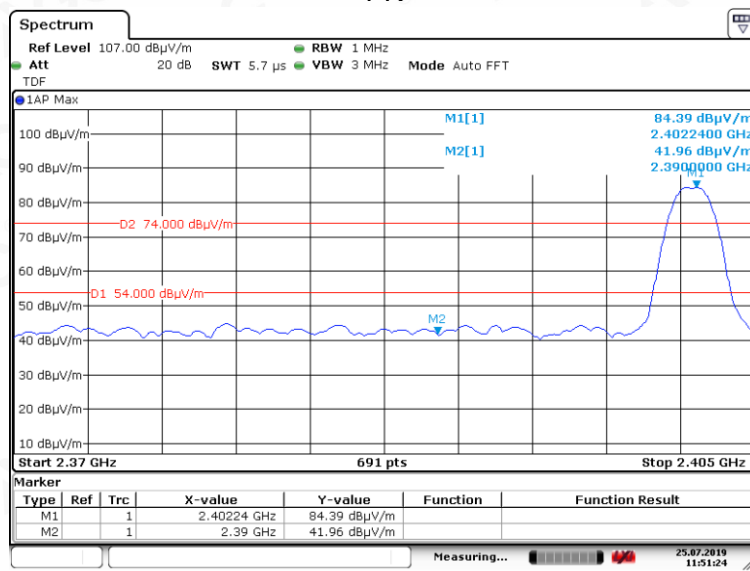


Date: 25.JUL.2019 11:51:03

RESULT: PASS

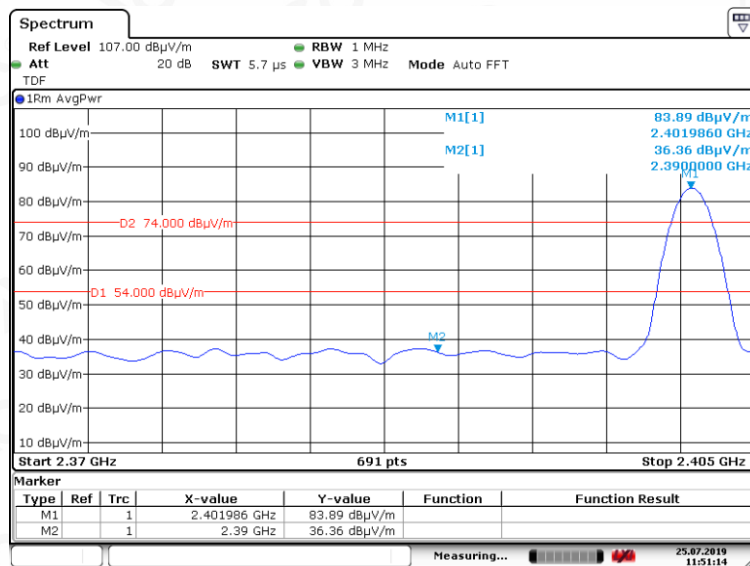
EUT	Bluetooth® Adapter	Model Name	BLE2LIN
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Vertical

PK



Date: 25.JUL.2019 11:51:23

AV



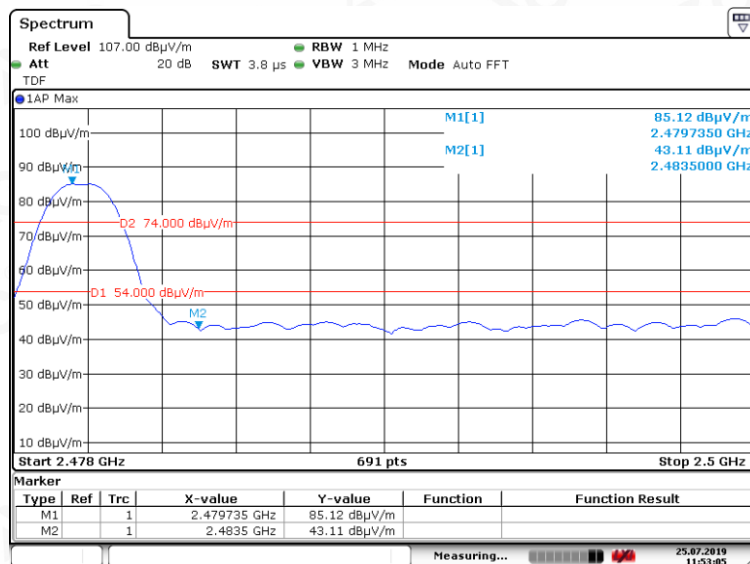
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**RESULT: PASS**

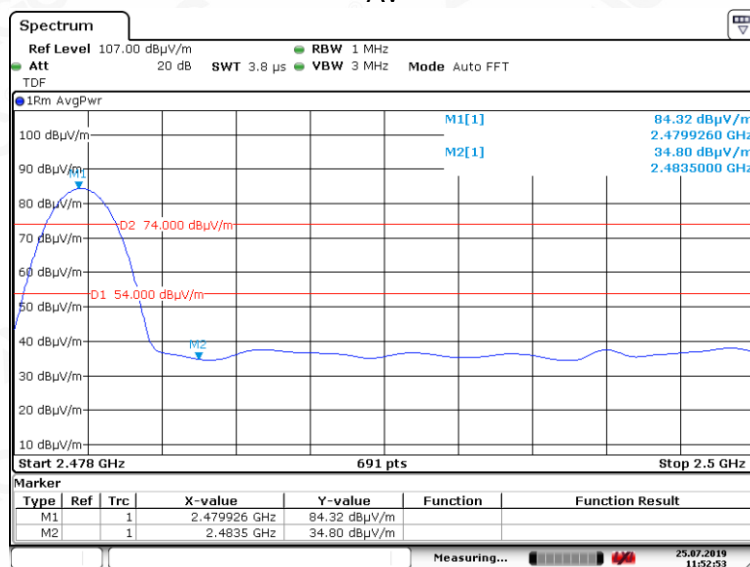


EUT	Bluetooth® Adapter	Model Name	BLE2LIN
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 3	Antenna	Horizontal

PK



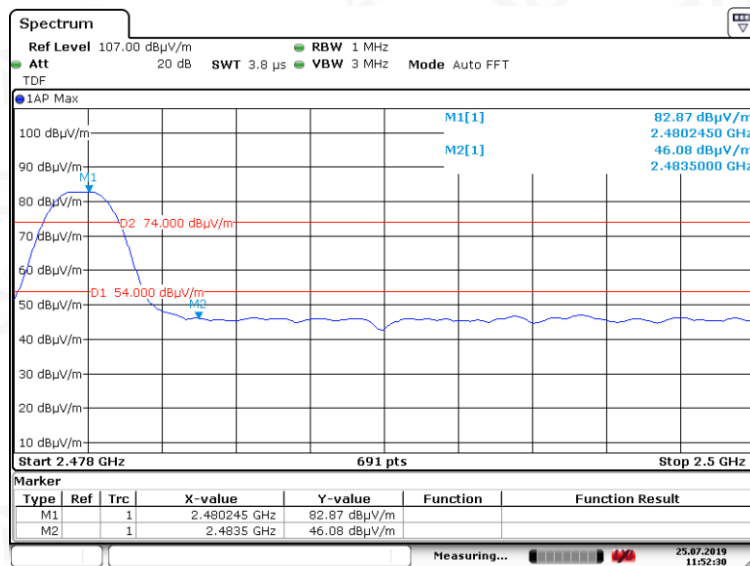
AV



RESULT: PASS

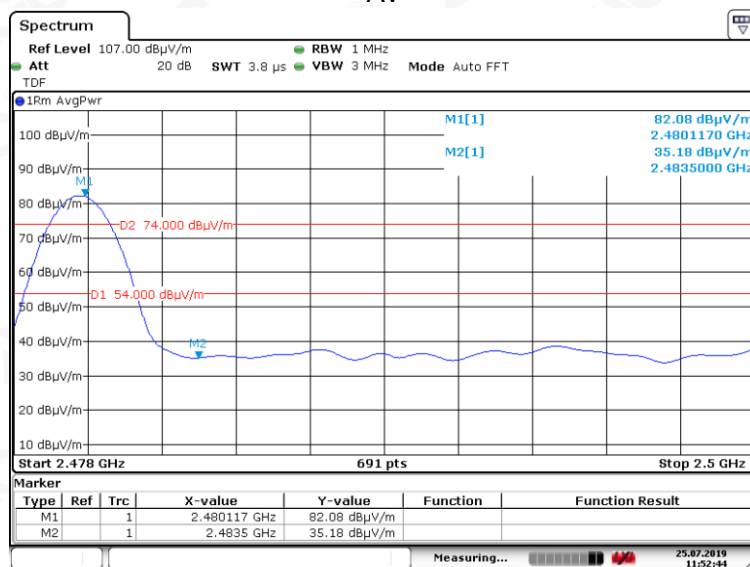
EUT	Bluetooth® Adapter	Model Name	BLE2LIN
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 3	Antenna	Vertical

PK



Date: 25.JUL.2019 11:52:29

AV



Date: 25.JUL.2019 11:52:44

## 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.

## 8. FCC LINE CONDUCTED EMISSION TEST

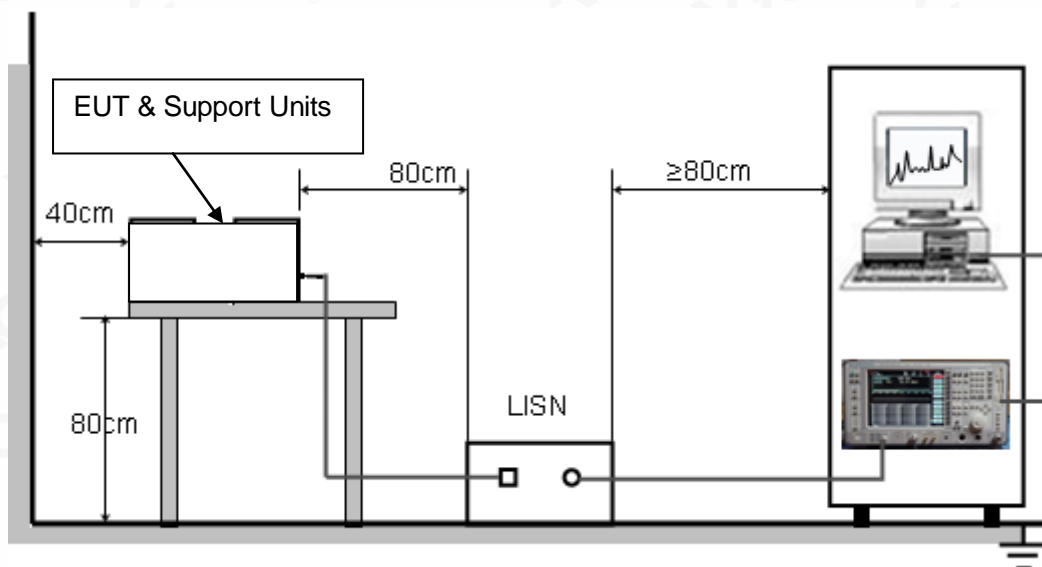
### 8.1. LIMITS OF LINE CONDUCTED EMISSION TEST

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.

### 8.2. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST



### 8.3. 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 9V by controller which received DC29V by adapter. The adapter 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.

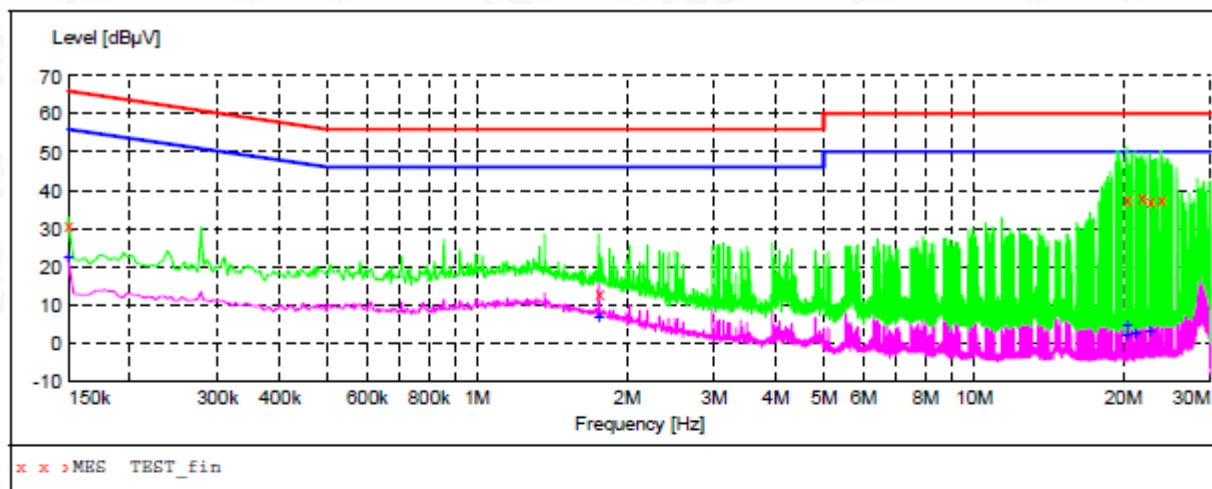
### 8.4. FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST

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.



## 8.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST

Line Conducted Emission Test Line 1-L



### MEASUREMENT RESULT: "TEST\_fin"

7/26/2019 11:22AM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.150000	31.00	10.8	66	35.0	QP	L1	FLO
1.758000	12.90	11.5	56	43.1	QP	L1	FLO
20.366000	37.80	12.5	60	22.2	QP	L1	FLO
21.750000	38.10	12.6	60	21.9	QP	L1	FLO
22.654000	37.30	12.6	60	22.7	QP	L1	FLO
23.842000	37.80	12.6	60	22.2	QP	L1	FLO

### MEASUREMENT RESULT: "TEST\_fin2"

7/26/2019 11:22AM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.150000	22.50	10.8	56	33.5	AV	L1	FLO
1.758000	6.80	11.5	46	39.2	AV	L1	FLO
20.274000	1.80	12.5	50	48.2	AV	L1	FLO
20.430000	4.70	12.5	50	45.3	AV	L1	FLO
21.194000	2.40	12.5	50	47.6	AV	L1	FLO
22.654000	3.10	12.6	50	46.9	AV	L1	FLO



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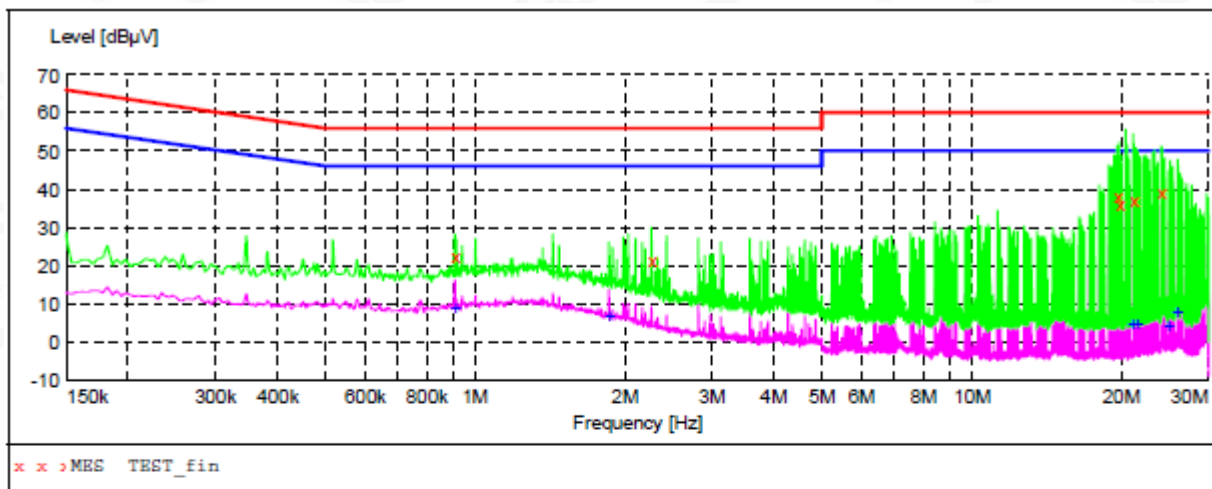
Add: 2/F., Building 2, Sanwei Chaxi Industrial Park, Sanwei Community,  
Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755 2523 4088

E-mail: agc@agc-cert.com

Service Hotline: 400 089 2118

### Line Conducted Emission Test Line 2-N



#### MEASUREMENT RESULT: "TEST\_fin"

7/26/2019 11:28AM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.910000	22.40	11.1	56	33.6	QP	N	FLO
2.266000	21.50	11.5	56	34.5	QP	N	FLO
19.678000	38.20	12.5	60	21.8	QP	N	FLO
19.850000	36.30	12.5	60	23.7	QP	N	FLO
21.194000	37.00	12.5	60	23.0	QP	N	FLO
24.050000	39.00	12.7	60	21.0	QP	N	FLO

#### MEASUREMENT RESULT: "TEST\_fin2"

7/26/2019 11:29AM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.910000	8.90	11.1	46	37.1	AV	N	FLO
1.862000	7.00	11.5	46	39.0	AV	N	FLO
21.194000	4.80	12.5	50	45.2	AV	N	FLO
21.586000	4.70	12.6	50	45.3	AV	N	FLO
24.946000	4.10	12.7	50	45.9	AV	N	FLO
25.998000	7.60	12.7	50	42.4	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

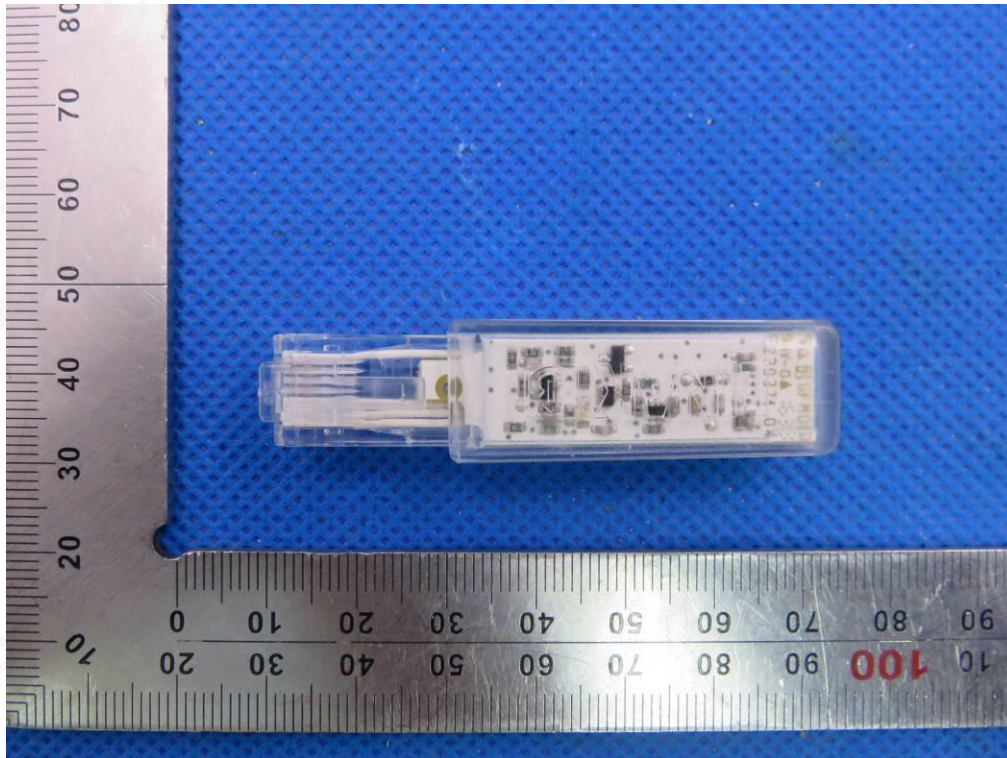


**CONDUCTED EMISSION TEST SETUP**

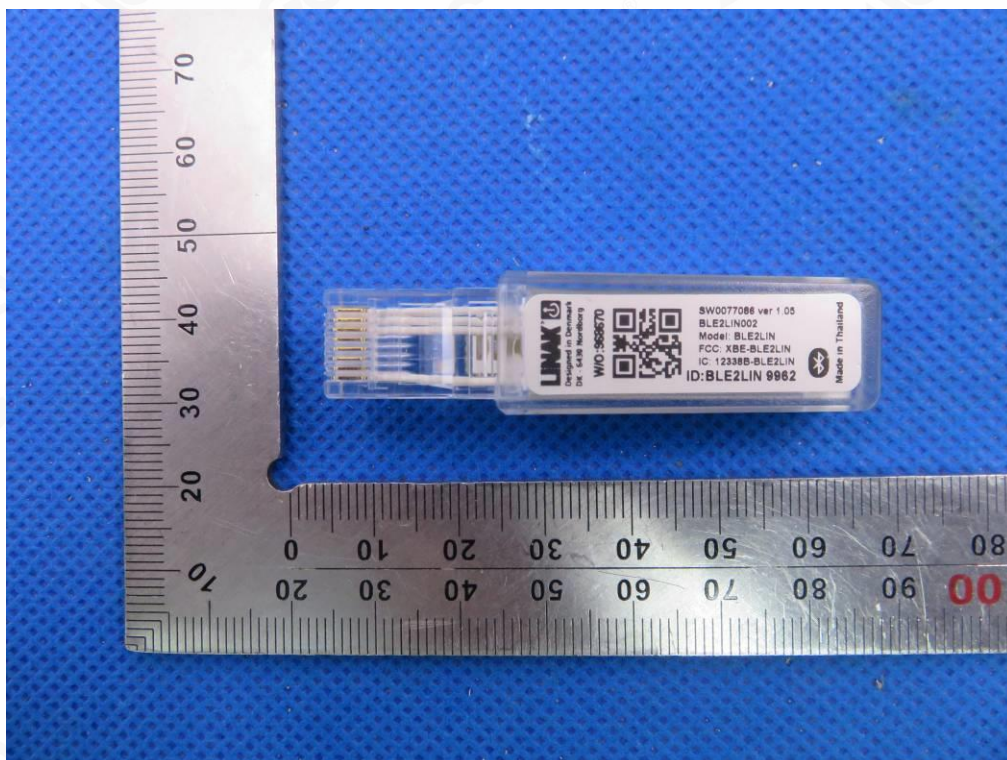


## APPENDIX B: PHOTOGRAPHS OF EUT

TOP VIEW OF EUT

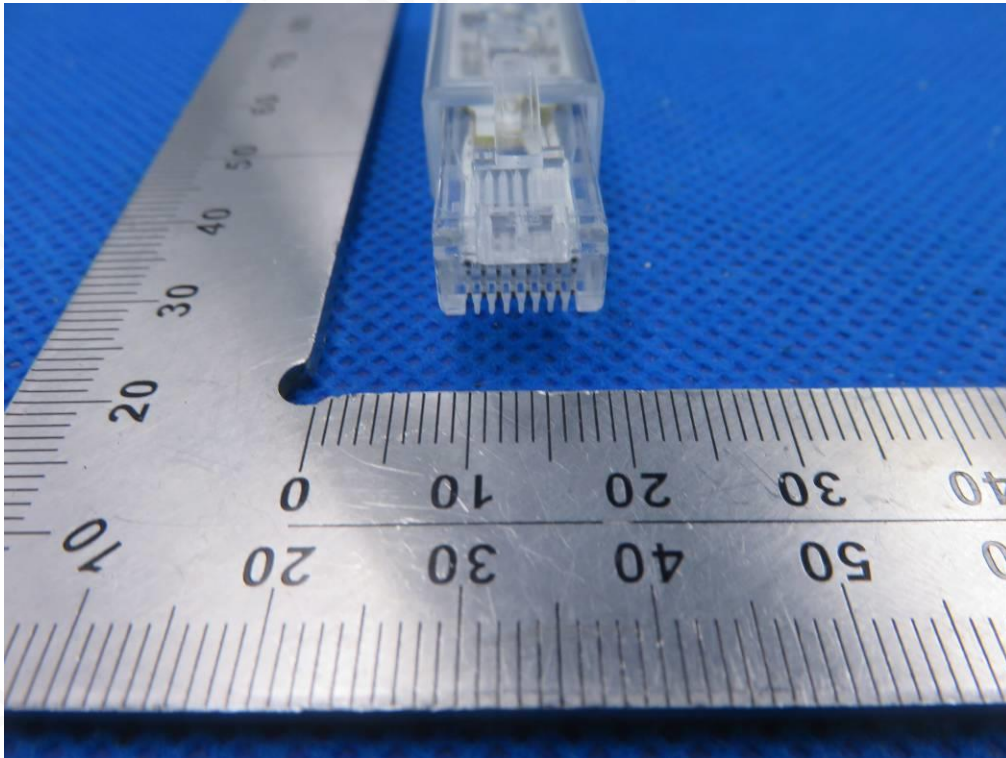


BOTTOM VIEW OF EUT

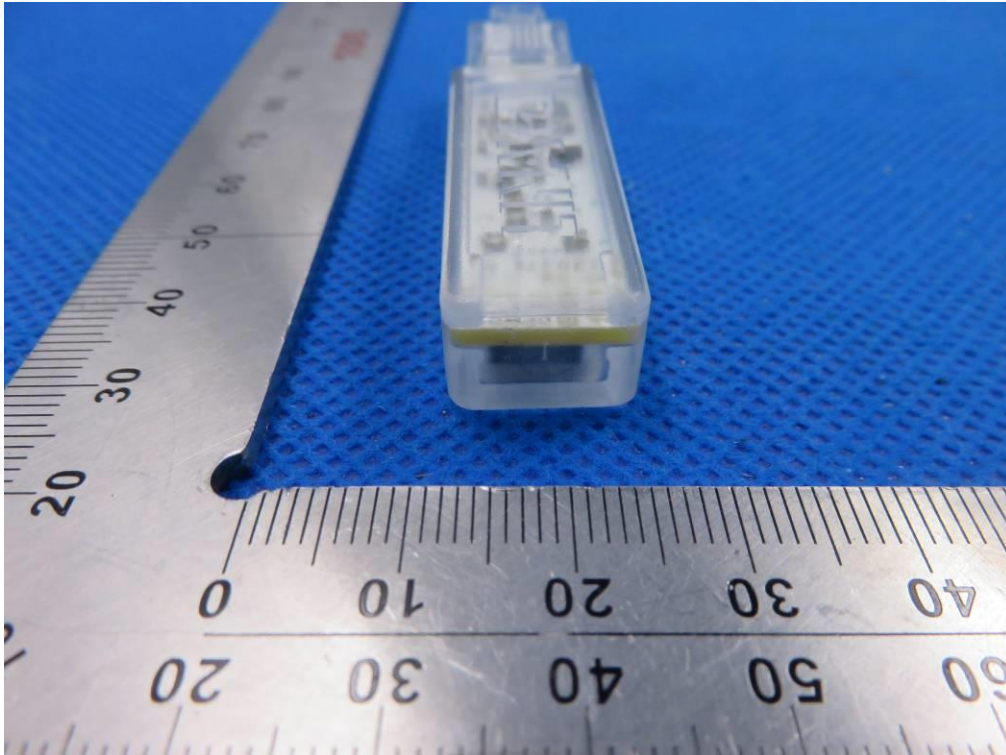




FRONT VIEW OF EUT

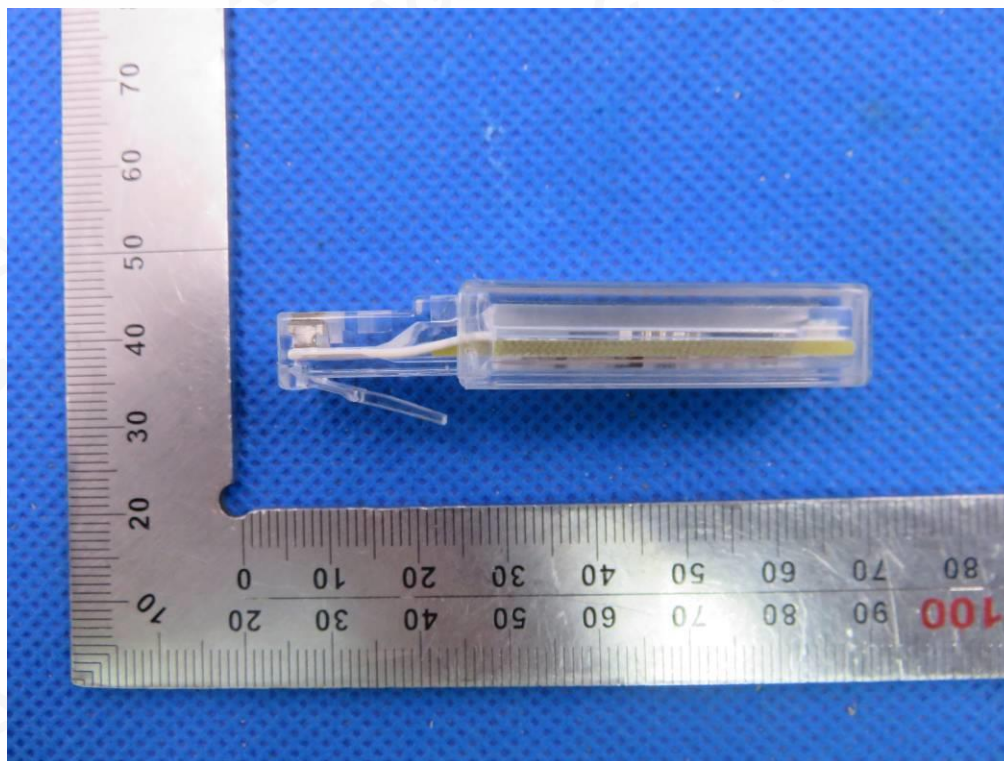


BACK VIEW OF EUT

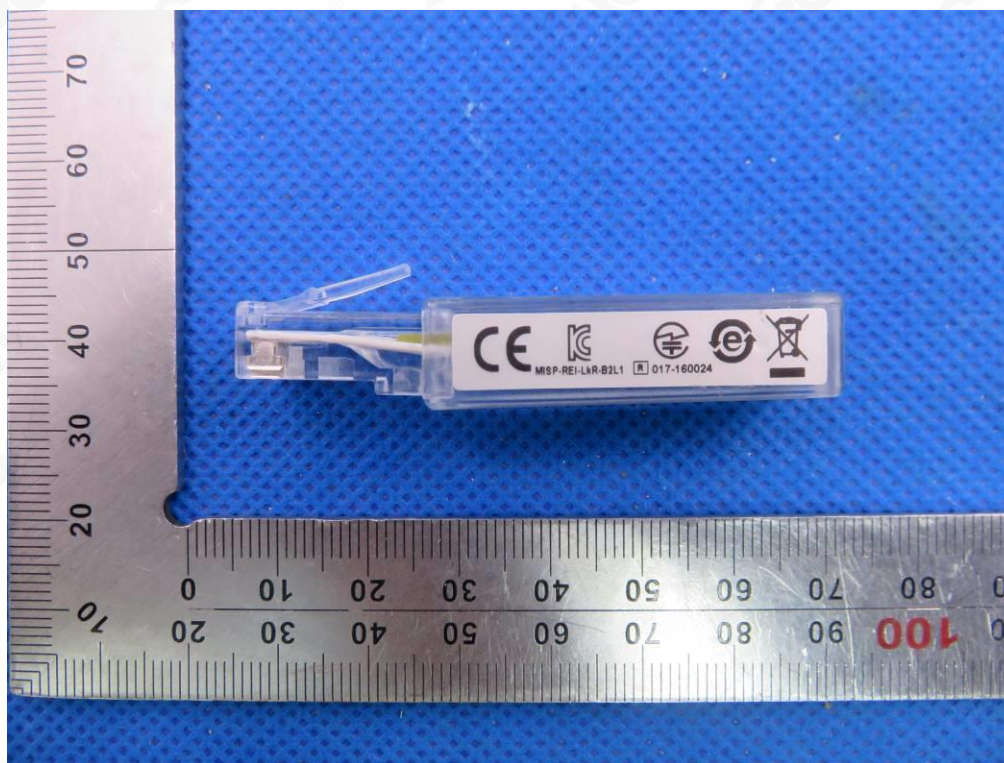




LEFT VIEW OF EUT

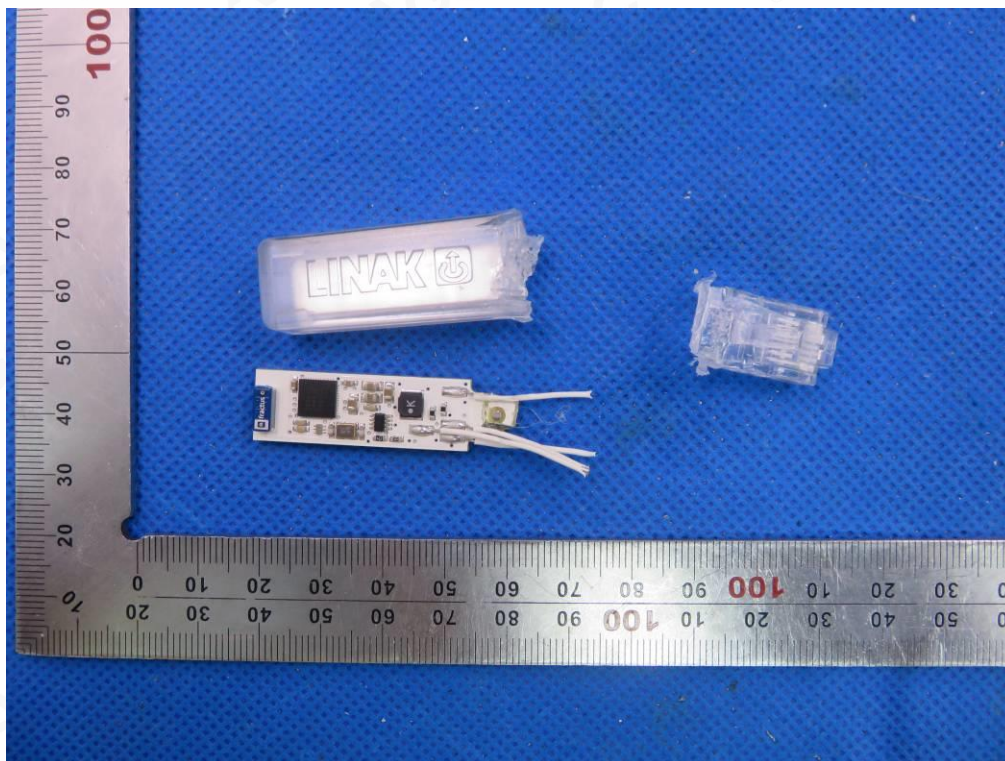


RIGHT VIEW OF EUT

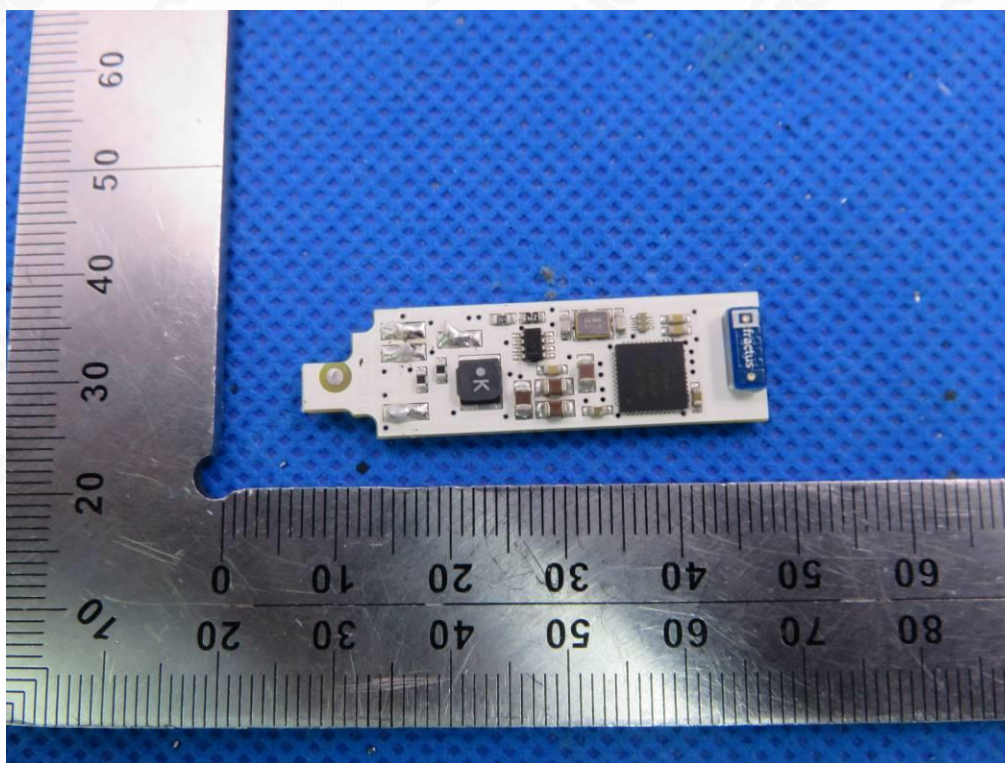




OPEN VIEW OF EUT

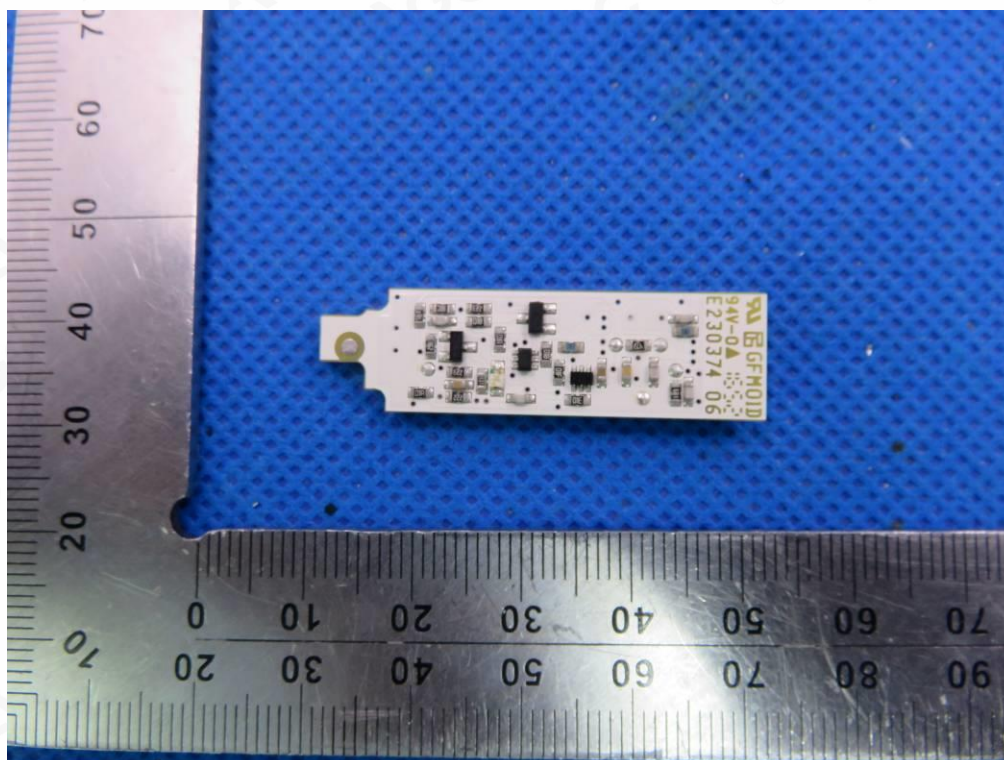


INTERNAL VIEW OF EUT-1





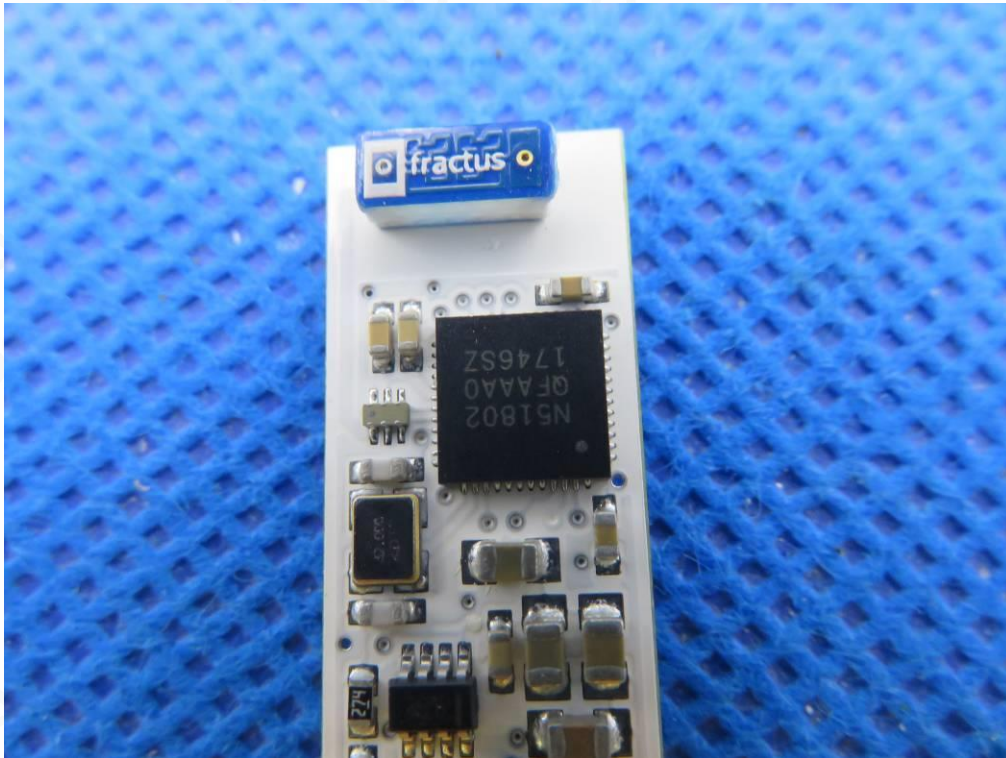
INTERNAL VIEW OF EUT-2



INTERNAL VIEW OF EUT-3



INTERNAL VIEW OF EUT-4



-----END OF REPORT-----



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