

# TEST REPORT

of

## FCC Part 15 Subpart B SDoC

☐ New Application; ☒ Class I PC; ☐ Class II PC

**Product :** 10 inch Android Panel PC (SoC)

**Brand Name:** ProDVX

**Model:** APPC-10SLB; APPC-10X; APPC-10XP;  
APPC-10XPL; APPC-10SLBN;  
APPC-10SLBNW; APPC-10SLBW;  
APPC-10XW; APPC-10XPW; APPC-10XPLW

**Model Difference:** For market segmentation

**FCC Rule Part:** Part 15 B, SDoC

**Applicant:** ProDVX Europe B.V.

**Address:** Europalaan 12F, 5232 BC Den Bosch, The Netherlands

### Test Performed by:

#### International Standards Laboratory Corp.

<LT Lab.>

\*Site Registration No.

BSMI: SL2-IN-E-0013; MRA TW1036; TAF: 0997; IC: IC4067B-4;

\*Address:

No. 120, Lane 180, Hsin Ho Rd.,

Lung-Tan Dist., Tao Yuan City 325, Taiwan

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Report No.: **ISL-18LR345FB-MA**

Issue Date : **2019/12/3**



Test results given in this report apply only to the specific sample(s) tested and are traceable to national or international standard through calibration of the equipment and evaluating measurement uncertainty herein.

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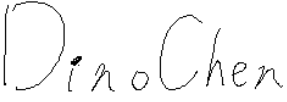
## VERIFICATION OF COMPLIANCE

**Applicant:** ProDVX Europe B.V.  
**Product Description:** 10 inch Android Panel PC (SoC)  
**Brand Name:** ProDVX  
**Model No.:** APPC-10SLB; APPC-10X; APPC-10XP; APPC-10XPL;  
APPC-10SLBN; APPC-10SLBNW; APPC-10SLBW;  
APPC-10XW; APPC-10XPW; APPC-10XPLW  
**Model Difference:** For market segmentation  
**FCC Rule Part:** Part 15 B, SDoC  
**Date of test:** 2018/11/02 ~ 2018/12/13  
**Date of EUT Received:** 2018/11/02

### We hereby certify that:

All the tests in this report have been performed and recorded in accordance with the standards described above and performed by an independent electromagnetic compatibility consultant, International Standards Laboratory Corp.

The test results contained in this report accurately represent the measurements of the characteristics and the energy generated by sample equipment under test at the time of the test. The sample equipment tested as described in this report is in compliance with the limits of above standards.

<b>Test By:</b>	 _____ <i>Jason Chao / Engineer</i>	<b>Date:</b>	2019/12/3 _____
<b>Prepared By:</b>	 _____ <i>Gigi Yeh / Engineer</i>	<b>Date:</b>	2019/12/3 _____
<b>Approved By:</b>	 _____ <i>Dino Chen / Senior Engineer</i>	<b>Date:</b>	2019/12/3 _____

## Version

Version No.	Date	Description
00	2018/12/18	Initial creation of document

## Uncertainty of Measurement

Description Of Test	Uncertainty
Conducted Emission (AC power line)	2.586 dB
Field Strength of Spurious Radiation	$\leq 30\text{MHz}$ : 2.96dB 30-1GHz: 4.22 dB 1-40 GHz: 4.08 dB
Conducted Power	2.412 GHz: 1.30 dB 5.805 GHz: 1.55 dB
Power Density	2.412 GHz: 1.30 dB 5.805 GHz: 1.67 dB
Frequency	0.0032%
Time	0.01%
DC Voltage	1%

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## 1. GENERAL INFORMATION

### 1.1. Product Description

General:

Product Name	10 inch Android Panel PC (SoC)	
Brand Name	ProDVX	
Model Name	APPC-10SLB; APPC-10X; APPC-10XP; APPC-10XPL; APPC-10SLBN; APPC-10SLBNW; APPC-10SLBW; APPC-10XW; APPC-10XPW; APPC-10XPLW	
Model Difference	For market segmentation	
RF function	BT and WiFi function	
Power Supply	12Vdc from AC/DC adapter	
	Adapter:	1. Model : 2ABL024F US Supplier: CWT 2. Model : SOY-1200200, Supplier: Shenzhen SOY Technology Co., Ltd. 3. Model : ZZU1588-200120 Supplier: JUNCTION GLOBAL TECHNOLOGY Co., LTD.

## 1.2. Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for Part15 Subpart B, is authorized under SDoC.

## 1.3. Test Methodology

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4: 2014). Radiated testing was performed at an antenna to EUT distance 3 meters.

## 1.4. Test Facility

The measurement facilities used to collect the 3m Radiated Emission and AC power line conducted data are located on the address of **International Standards Laboratory Corp.** <LT Lab.> No. 120, Lane 180, Hsin Ho Rd., Lung-Tan Dist., Tao Yuan City 325, Taiwan which are constructed and calibrated to meet the FCC requirements in documents ANSI C63.4: 2014. FCC Registration Number is: TW1036, Canada Registration Number: 4067B-4.

## 1.5. Special Accessories

Not available for this EUT intended for grant.

## 1.6. Equipment Modifications

Not available for this EUT intended for grant.

## **2. System Test Configuration**

### **2.1. EUT Configuration**

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

### **2.2. EUT Exercise**

The EUT was operated in the normal mode.

### **2.3. Test Procedure**

#### **2.3.1 Conducted Emissions**

The EUT is placed on a turn table which is 0.8 m above ground plane. According to the requirements in Section 7 of ANSI C63.4: 2014. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-Peak and average detector mode.

#### **2.3.2 Radiated Emissions**

The EUT is placed on a turn table which is 0.8 m above ground plane. The turn table shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the max. emission, the relative positions of this hand-held transmitter (EUT) was rotated through three orthogonal axes and measurement procedures for electric field radiated emissions above 1 GHz the EUT measurement is to be made “while keeping the antenna in the ‘cone of radiation’ from that area and pointed at the area both in azimuth and elevation, with polarization oriented for maximum response.” is still within the 3dB illumination BW of the measurement antenna. according to the requirements in Section 8 of ANSI C63.4: 2014.

## 2.4. Limitation

### (1) Conducted Emission

According to section 15.107(a), ICES-003 Section 6.1 Conducted Emission Limits is as following.

Frequency range MHz	Class B Limits dB (uV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	46
5 to 30	60	50
Note 1.The lower limit shall apply at the transition frequencies 2.The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.		

### (1) Radiated Emission

According to section 15.109(a), ICES-003 Section 6.2 or CISPR 22 Radiated Emission Class B Limits is as following:

Frequency (MHz)	Field strength $\mu\text{V/m}$	Distance (m)	Field strength at 3m $\text{dB}\mu\text{V/m}$
30-88	100	3	40
88-216	150	3	43.5
216-960	200	3	46
Above 960	500	3	54

Standard	Date	Description
CISPR 22	2010	Limits and methods of measurement of radio interference characteristics of information technology equipment.



CISPR 22 Limit:

Frequency range MHz	Limits dBuV/m (10m)
	Quasi-peak
30 to 230	30
230 to 1000	37

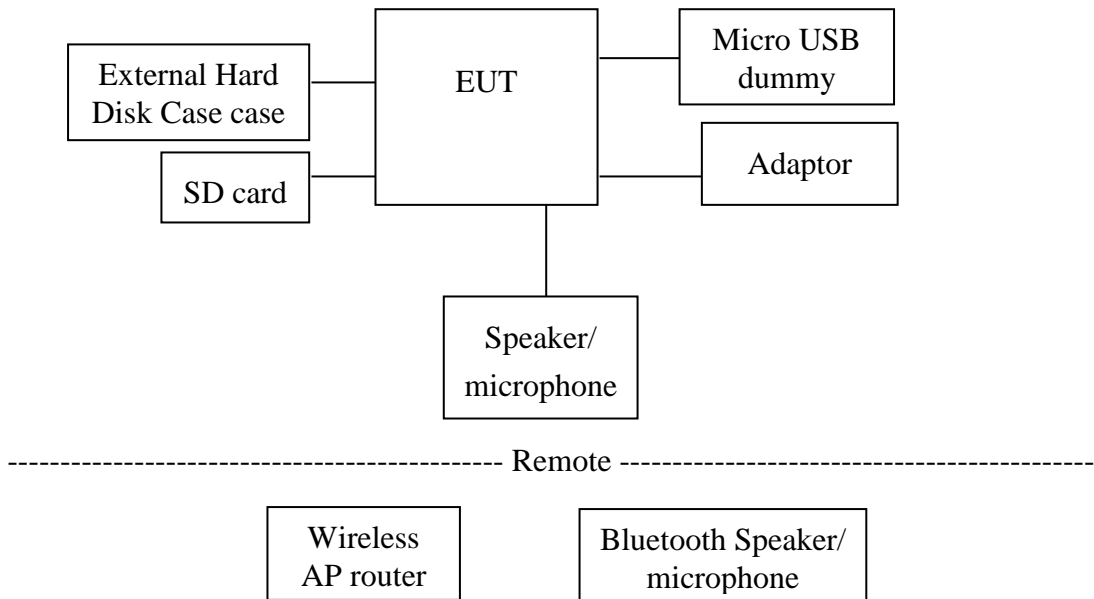
Frequency range GHz	Limits dBuV/m (3m)	
	Average	Peak
1 to 3	50	70
3 to 6	54	74

Remark: 1. Emission level in dBuV/m=20 log (uV/m)  
2. Measurement was performed at an antenna to the closed point of EUT distance of 3 meters.

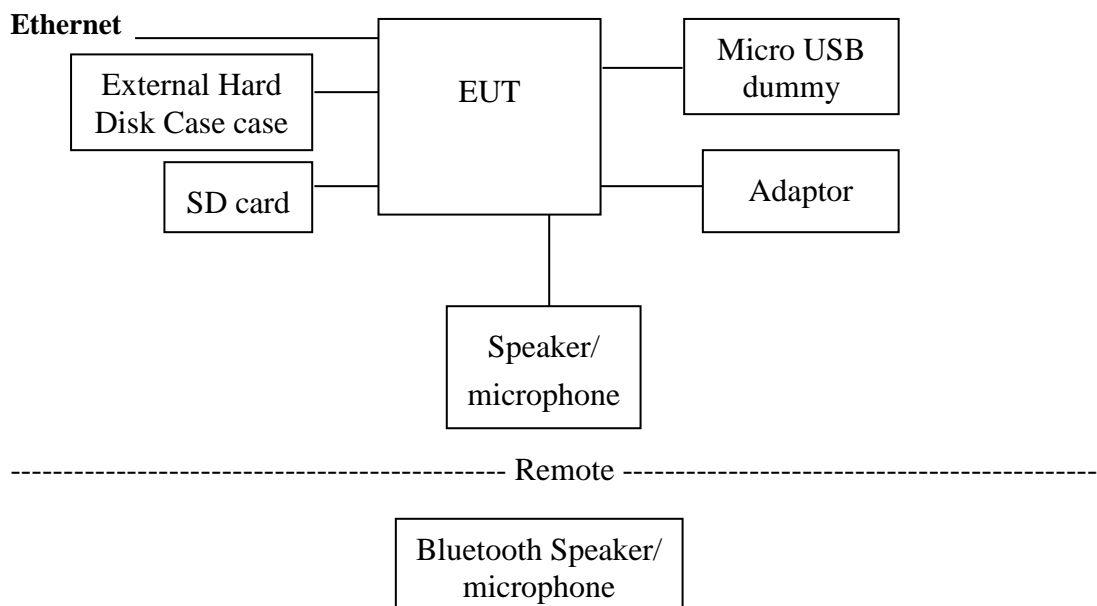
## 2.5. Configuration of Tested System

Fig. 1-1 Configuration

### Config 1



### Config 2



**Table 1-1 Support Equipment Used in Tested System**

Item	Equipment	Mrf/Brand	Model name	Series No	Data Cable	Power Cable
1	External Hard Disk Case	BUFFALO	HD-PUS500U3B	N/A	shielded /1.27M	N/A
2	Speaker/ microphone	HTC	RC-E160	N/A	Non-shield /1.4M	N/A
3	Bluetooth Speaker/ microphone	N/A	SA-868	N/A	N/A	N/A
4	Micro Secure digital card	ADATA	AD4GTFC4	N/A	N/A	N/A
5	Wireless AP router	ASUS	RT-AC66U	80195030	N/A	Non-shield / 1.8M

**I/O Cable Condition of EUT and Support Units**

Description	Path	Cable Length	Cable Type	Connector Type
Adaptor Cable	110V (~240V) to EUT(DC12V)	3M	Non-shielded	Metal Head
Audio cable	Speaker/Microphone to EUT Line in and out Port	1.4M	Non-shielded	Metal Head
USB data cable(for EMI)	External Hard Disk Case to EUT USB Port	1.27m	Shielded	Metal Head
USB data cable(for EMS)	Traveling Disk to EUT USB port	1.2M	Shielded	Metal Head
Micro USB data cable	EUT Micro USB port to Dummy	1.2M	Non-shielded	Metal Head
LAN(RJ45) cable	Ethernet to EUT RJ45 port	10M	Non-shielded	Plastic Head

**Note:** All the above equipment/cables were placed in worse case positions to maximize emission signals during emission test.

**Grounding:** Grounding was in accordance with the manufacturer's requirements and conditions for the intended use.

### 3. Summary of Test Results

Rules	Description Of Test	Result
§15.107	Conducted Emission Class B	Compliant
§15.109	Radiated Emission(Below 1GHz) Class B	Compliant
§15.109	Radiated Emission(above 1GHz) Class B	Compliant

### 4. Description of test modes

This is a modular application and the EUT was stayed in normal operation mode.

#### Test Plan

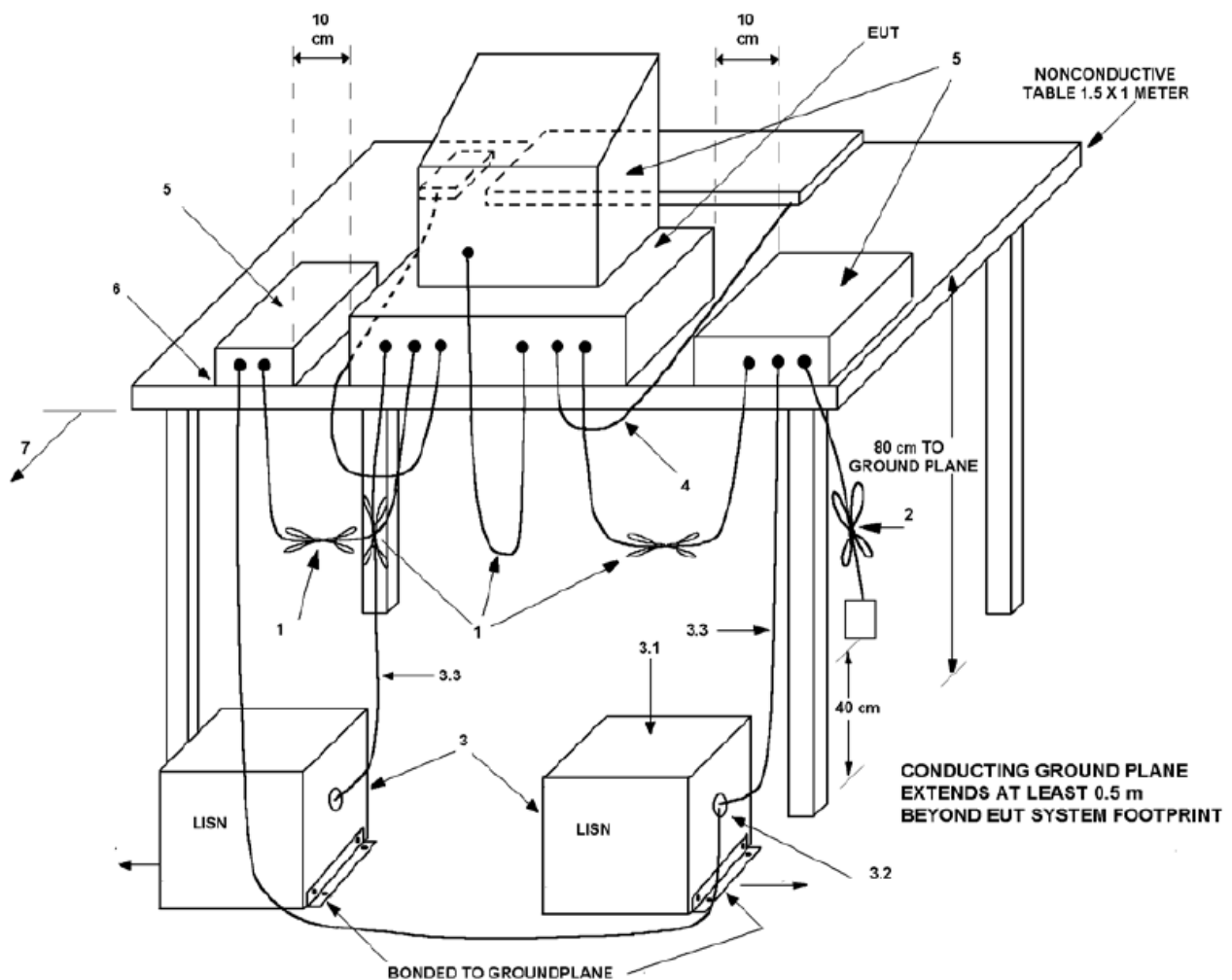
	Config 1	Config 2
Applicable standard	FCC 15B	
Accessories	UE+SD+USB +Wi-Fi + adaptor	UE+SD+USB +ethemet + adaptor
Description	BT and Wi-Fi link	BT and LAN link
Radiated emission(30M~1GHz)(above 1GHz)	Measured	Measured
Conducted emission (DC Power)	N/A	N/A
Conducted emission (AC Power)	Measured	Measured

## 5. Conducted Emissions Test

### 5.1. Measurement Procedure:

1. The EUT was placed on a table which is 0.8m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. Repeat above procedures until all frequency measured were complete.

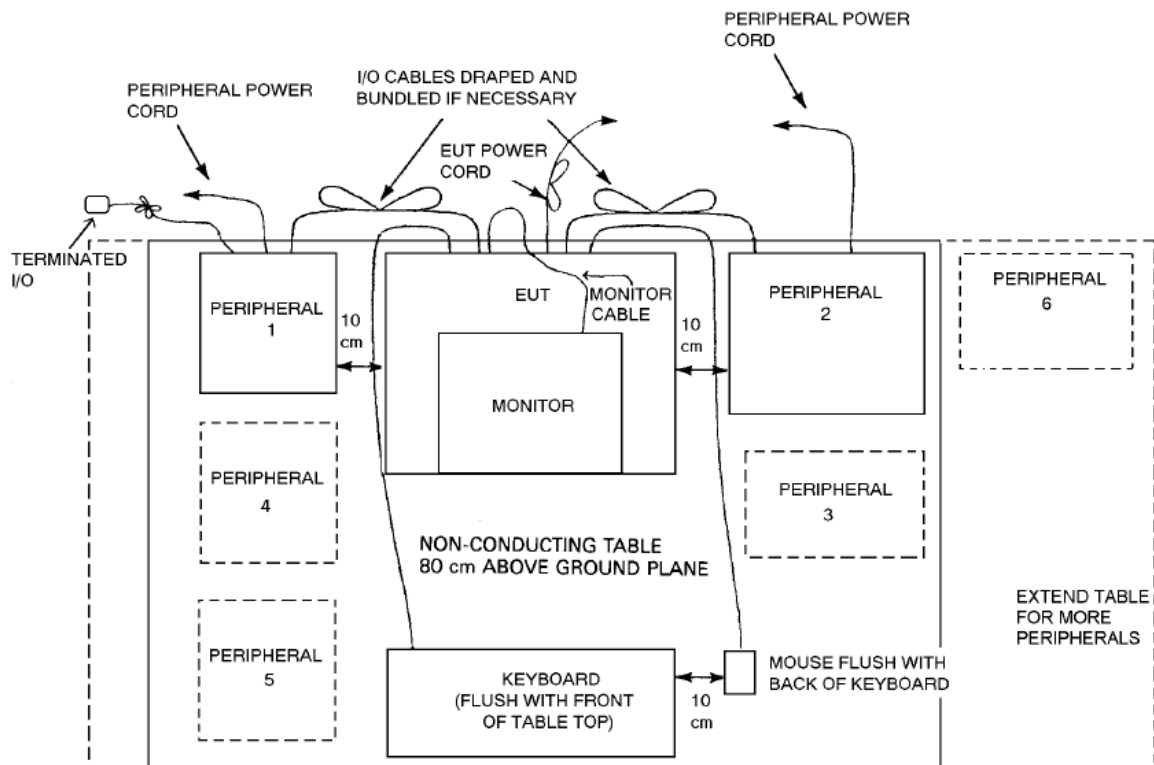
### 5.2. Test SET-UP (Block Diagram of Configuration)



**LEGEND:**

1. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 cm to 40 cm long (see 6.2.5, also 11.5.5).
2. Input/output (I/O) cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m (see 6.2.5).
3. EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated into 50  $\Omega$  loads. LISN can be placed on top of, or immediately beneath, reference ground plane (see 5.2.4 and 7.3.1).
  - 3.1 All other equipment powered from additional LISN(s).
  - 3.2 Multiple outlet strips can be used for multiple power cords of non-EUT equipment.
  - 3.3 LISN at least 80 cm from nearest part of EUT chassis.
4. Cables of hand-operated devices, such as keyboards and mice, shall be placed as for normal use (see 6.3.2.4 and 11.5.5).
5. Non-EUT components of EUT system being tested (see also Figure 7).
6. Rear of EUT, including peripherals, shall all be aligned and flush with rear of tabletop (see 6.3.2.2 and 6.3.2.3).
7. Rear of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane (see 5.2.3 for options).

**Figure 7 —EUT test configuration/arrangement for tabletop equipment (radiated and conducted emissions)—top view**

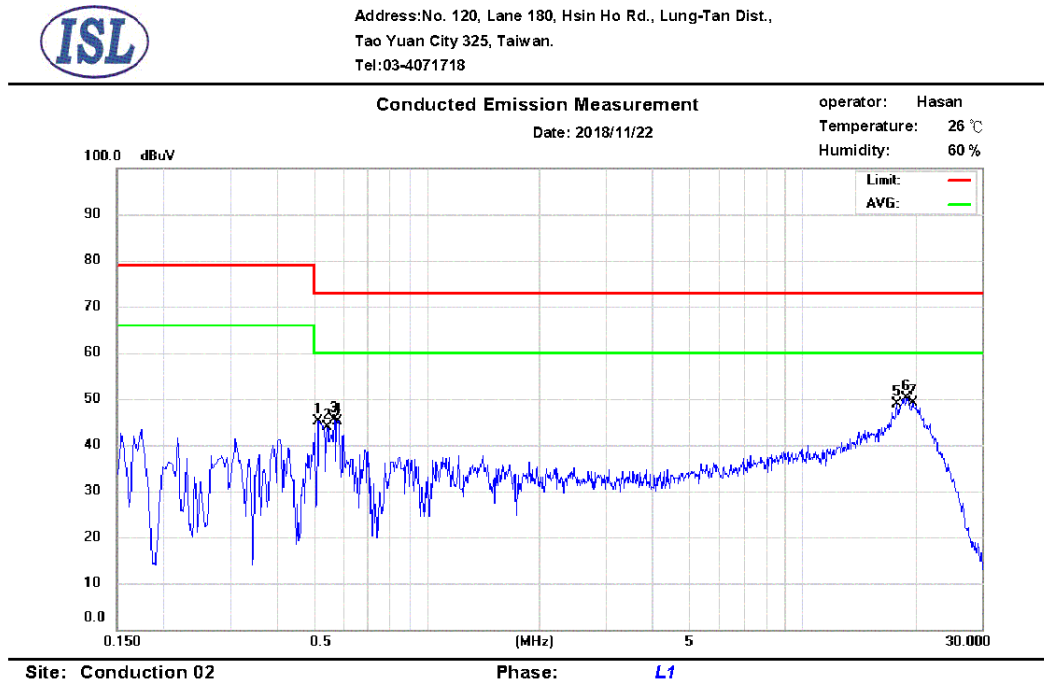


### 5.3. Measurement Equipment Used:

Location Con04	Equipment Name	Brand	Model	S/N	Last Cal. Date	Next Cal. Date
Conduction 04	LISN 18	ROHDE & SCHWARZ	ENV216	101424	05/31/2018	05/31/2019
Conduction 04	LISN 03	ROHDE & SCHWARZ	ESH3-Z5	828874/010	07/22/2018	07/22/2019
Conduction 04	ISN T8 07	Teseq GmbH	ISN T800	30834	08/24/2018	08/24/2019
Conduction 04	Conduction 04-3 Cable	WOKEN	CFD 300-NL	conduction 04-3	08/30/2018	08/30/2019
Conduction04	EMI Receiver 16	ROHDE & SCHWARZ	ESCI	101221	11/17/2018	11/17/2019

## 5.4. Measurement Result:

Config 1



No.	Frequency (MHz)	QP_R (dBuV)	AVG_R (dBuV)	Correct Factor (dB)	QP Emission (dBuV)	QP Limit (dBuV)	QP Margin (dB)	AVG Emission (dBuV)	AVG Limit (dBuV)	AVG Margin (dB)
1	0.518	34.32	24.97	9.72	44.04	73.00	-28.96	34.69	60.00	-25.31
2	0.546	33.43	23.38	9.72	43.15	73.00	-29.85	33.10	60.00	-26.90
3	0.570	33.71	23.96	9.72	43.43	73.00	-29.57	33.68	60.00	-26.32
4	0.582	33.23	23.93	9.72	42.95	73.00	-30.05	33.65	60.00	-26.35
5	17.850	33.07	27.05	10.08	43.15	73.00	-29.85	37.13	60.00	-22.87
6	18.930	35.55	29.75	10.10	45.65	73.00	-27.35	39.85	60.00	-20.15
7	19.666	34.76	28.95	10.11	44.87	73.00	-28.13	39.06	60.00	-20.94



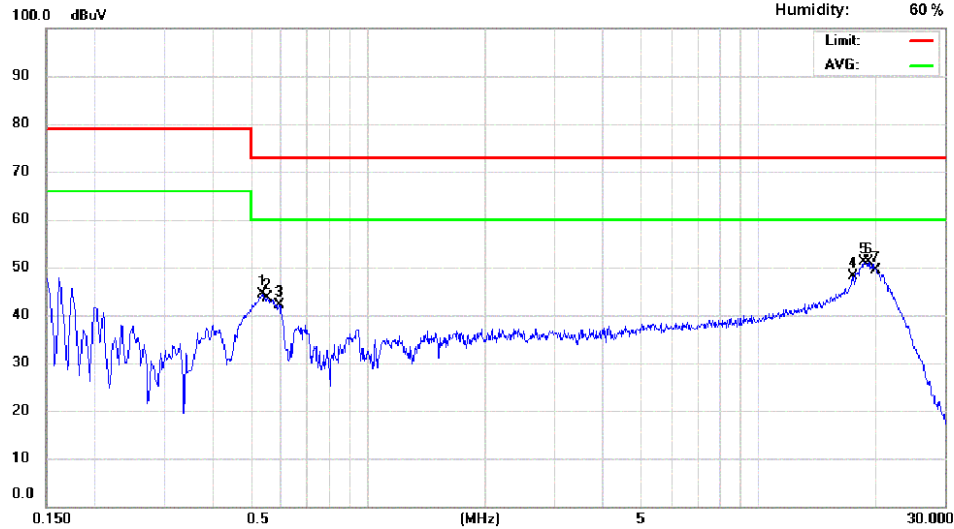


Address: No. 120, Lane 180, Hsin Ho Rd., Lung-Tan Dist.,  
Tao Yuan City 325, Taiwan.  
Tel: 03-4071718

### Conducted Emission Measurement

Date: 2018/11/22

operator: Hasan  
Temperature: 26 °C  
Humidity: 60 %



Site: Conduction 02

Phase: N

No.	Frequency (MHz)	QP_R (dBuV)	AVG_R (dBuV)	Correct Factor (dB)	QP Emission (dBuV)	QP Limit (dBuV)	QP Margin (dB)	AVG Emission (dBuV)	AVG Limit (dBuV)	AVG Margin (dB)
1	0.538	32.97	23.48	9.72	42.69	73.00	-30.31	33.20	60.00	-26.80
2	0.558	31.48	22.61	9.72	41.20	73.00	-31.80	32.33	60.00	-27.67
3	0.594	29.20	19.73	9.72	38.92	73.00	-34.08	29.45	60.00	-30.55
4	17.502	31.93	26.18	10.08	42.01	73.00	-30.99	36.26	60.00	-23.74
5	18.370	35.00	29.20	10.09	45.09	73.00	-27.91	39.29	60.00	-20.71
6	19.198	35.54	29.67	10.10	45.64	73.00	-27.36	39.77	60.00	-20.23
7	20.314	33.72	28.04	10.11	43.83	73.00	-29.17	38.15	60.00	-21.85

Config 2

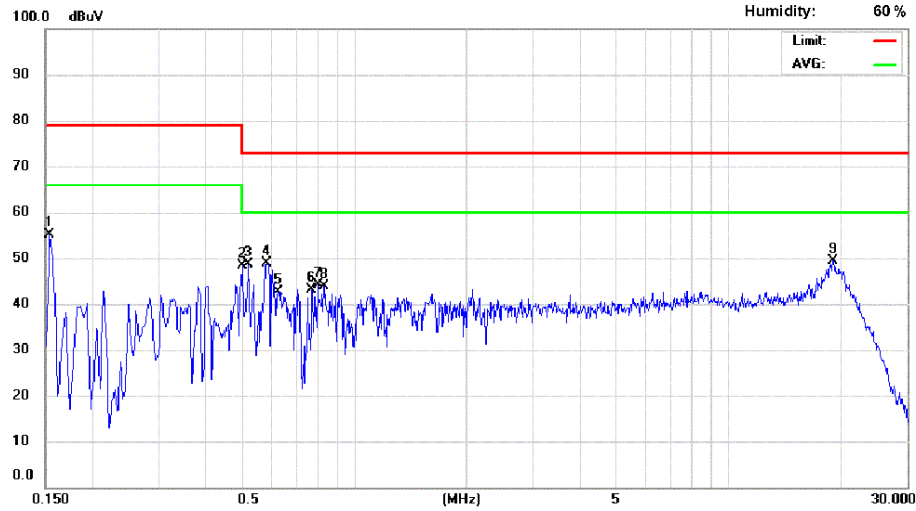


Address: No. 120, Lane 180, Hsin Ho Rd., Lung-Tan Dist.,  
Tao Yuan City 325, Taiwan.  
Tel: 03-4071718

**Conducted Emission Measurement**

Date: 2018/11/22

operator: Hasan  
Temperature: 26 °C  
Humidity: 60 %



Site: Conduction 02

Phase: **L1**

No.	Frequency (MHz)	QP_R (dBuV)	AVG_R (dBuV)	Correct Factor (dB)	QP Emission (dBuV)	QP Limit (dBuV)	QP Margin (dB)	AVG Emission (dBuV)	AVG Limit (dBuV)	AVG Margin (dB)
1	0.154	36.74	16.84	9.72	46.46	79.00	-32.54	26.56	66.00	-39.44
2	0.506	36.52	26.61	9.72	46.24	73.00	-26.76	36.33	60.00	-23.67
3	0.522	37.58	27.79	9.72	47.30	73.00	-25.70	37.51	60.00	-22.49
4	0.594	37.26	26.40	9.72	46.98	73.00	-26.02	36.12	60.00	-23.88
5	0.630	28.96	18.03	9.72	38.68	73.00	-34.32	27.75	60.00	-32.25
6	0.774	26.87	16.25	9.74	36.61	73.00	-36.39	25.99	60.00	-34.01
7	0.802	30.96	20.10	9.74	40.70	73.00	-32.30	29.84	60.00	-30.16
8	0.834	30.12	20.73	9.74	39.86	73.00	-33.14	30.47	60.00	-29.53
9	19.114	33.93	28.20	10.10	44.03	73.00	-28.97	38.30	60.00	-21.70



Address: No. 120, Lane 180, Hsin Ho Rd., Lung-Tan Dist.,  
Tao Yuan City 325, Taiwan.  
Tel: 03-4071718

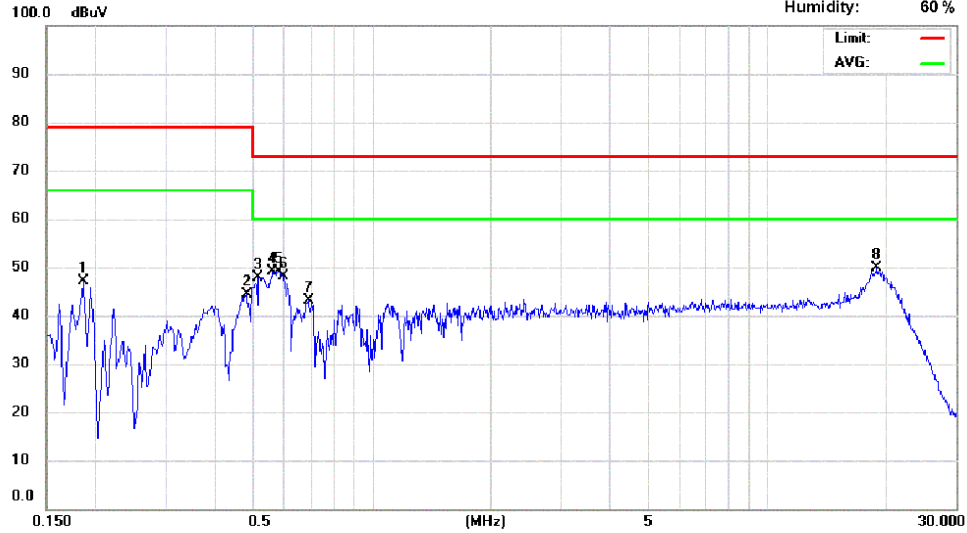
### Conducted Emission Measurement

Date: 2018/11/22

operator: Hasan

Temperature: 26 °C

Humidity: 60 %



Site: Conduction 02

Phase: N

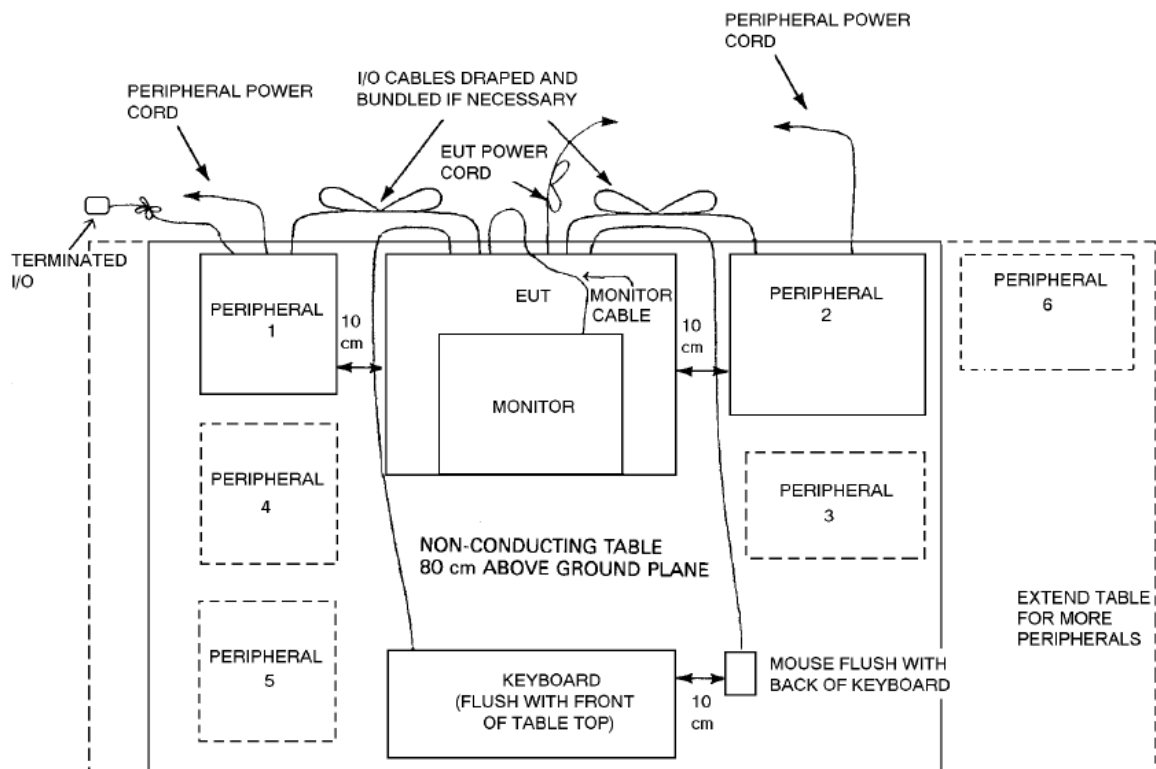
No.	Frequency (MHz)	QP_R (dBuV)	AVG_R (dBuV)	Correct Factor (dB)	QP Emission (dBuV)	QP Limit (dBuV)	QP Margin (dB)	AVG Emission (dBuV)	AVG Limit (dBuV)	AVG Margin (dB)
1	0.186	33.69	17.76	9.71	43.40	79.00	-35.60	27.47	66.00	-38.53
2	0.482	32.42	21.99	9.72	42.14	79.00	-36.86	31.71	66.00	-34.29
3	0.518	36.39	27.67	9.72	46.11	73.00	-26.89	37.39	60.00	-22.61
4	0.558	35.51	24.83	9.72	45.23	73.00	-27.77	34.55	60.00	-25.45
5	0.582	36.79	26.70	9.72	46.51	73.00	-26.49	36.42	60.00	-23.58
6	0.602	34.67	22.76	9.72	44.39	73.00	-28.61	32.48	60.00	-27.52
7	0.690	30.33	18.84	9.72	40.05	73.00	-32.95	28.56	60.00	-31.44
8	18.922	34.35	28.79	10.10	44.45	73.00	-28.55	38.89	60.00	-21.11

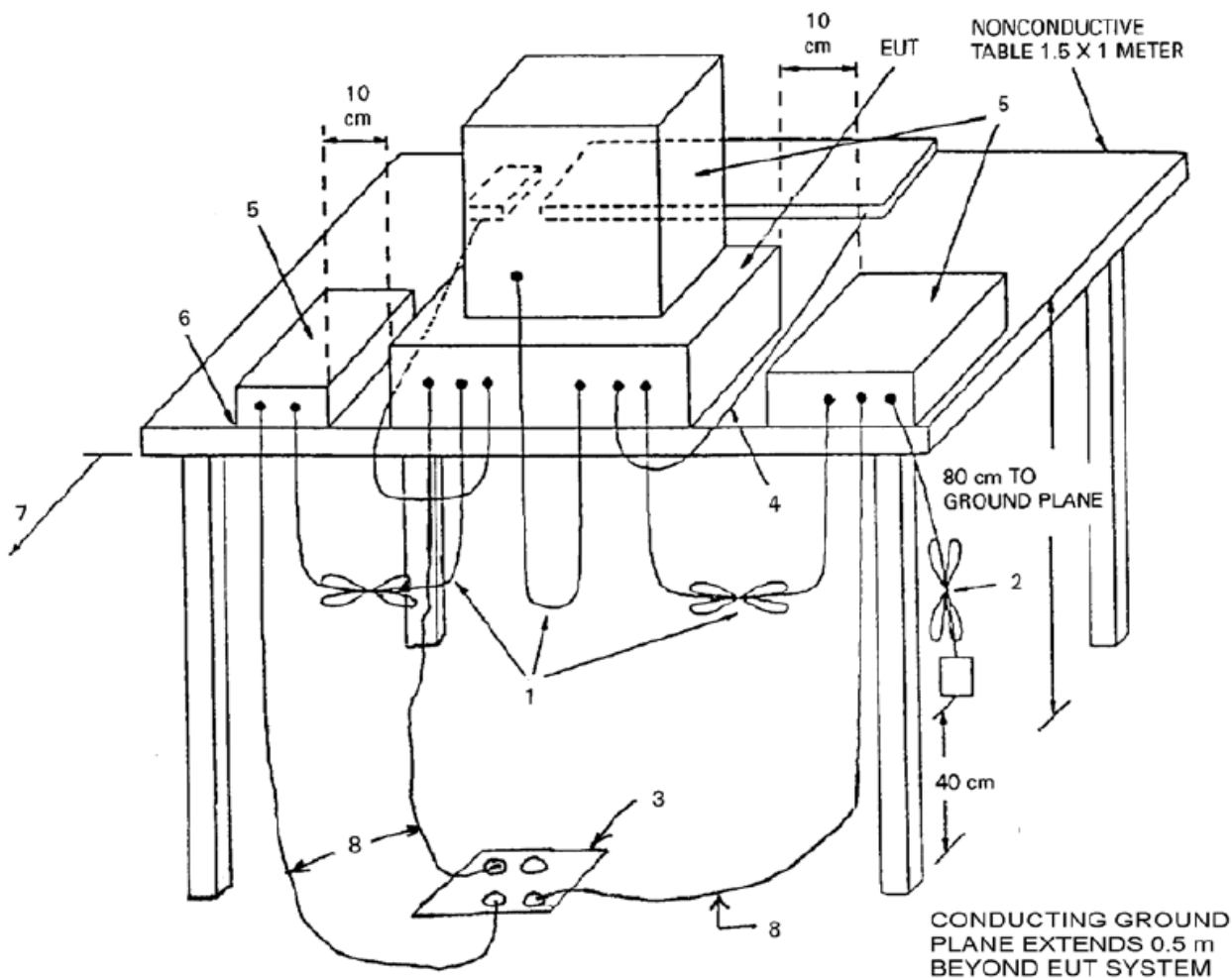
## 6. Radiated Emission Test

### 6.1. Measurement Procedure

1. EUT was placed on an 0.8m wooden table.
2. Set up EUT with support units and turn on the power of all equipment.
3. Link the EUT with Telecommunication tester, setup the test mode. The transmitter operating at continuously mode and max output rated power.
4. The receive antenna is placed at 10m(3m for above 1GHz) distance from the EUT and search height from 1-4m.
5. The turntable was slowly rotated to locate the direction of maximum emission. Once maximum direction is determined, the search antenna was raised and lowered in both vertical and horizontal polarizations.

### 6.2. Test SET-UP (Block Diagram of Configuration)





**LEGEND:**

1. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center, forming a bundle 30 cm to 40 cm long (see 6.2.5 and 11.5.5).
2. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated if required using the correct terminating impedance. The total length shall not exceed 1 m (see 6.2.5).
3. If LISNs are kept in the test setup for radiated emissions, it is preferred that they be installed under the ground plane with the receptacle flush with the ground plane (see 6.2.5).
4. Cables of hand-operated devices, such as keyboards and mice, shall be placed as for normal use (see 6.3.2.4 and 11.5.5).
5. Non-EUT components of EUT system being tested (see also Figure 7).
6. Rear of EUT, including peripherals, shall all be aligned and flush with rear of tabletop (see 6.3.2.2 and 6.3.2.3).
7. No vertical conducting plane used (see 5.2.3).
8. Power cords drape to the floor and are routed over to receptacle (see 6.2.5).

**Figure 10 —Test arrangement for radiated emissions of tabletop equipment**

### 6.3. Measurement Equipment Used:

Location Chmb02	Equipment Name	Brand	Model	S/N	Last Cal. Date	Next Cal. Date
Radiation (Chamber02)	BILOG Antenna 17	Schwarzbeck	Schwarzbeck VULB 9168+EMCI-N -6-05	645	03/02/2018	03/02/2019
Radiation (Chamber02)	Preamplifier 25	EMCI	EMC9135	980295	03/05/2018	03/05/2019
Radiation (Chamber02)	Coaxial Cable Chmb 02-10M-02	EMC	RG214U	Chmb 02-10M-02	08/30/2018	08/30/2019
Radiation (Chamber02)	EMI Receiver 12	ROHDE & SCHWARZ	ESCI	100804	08/21/2018	08/21/2019

Location Chmb14	Equipment Name	Brand	Model	S/N	Last Cal. Date	Next Cal. Date
Rad. Above 1GHz	Spectrum Analyzer 24 (1G~26.5GHz)	Agilent	N9010A	MY49060537	08/29/2018	08/29/2019
Rad. Above 1GHz	Horn Antenna 13	ETS-Lindgren	3117	00161229	09/03/2018	09/03/2019
Rad. Above 1GHz	Preamplifier 13	MITEQ	AFS44-001018 00-25-10P-44	1329256	10/26/2018	10/26/2019
Rad. Above 1GHz	Microwave Cable 32	AGILENT	A1K50-UP035 8	A1K50-80CM _2	09/21/2018	09/21/2019
Rad. Above 1GHz	Microwave Cable 33	AGILENT	A1K50-UP035 8	N1K50-600C M_2	09/21/2018	09/21/2019

#### 6.4. Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CL - AG$$

Where	FS = Field Strength	CL = Cable Attenuation Factor (Cable Loss)
	RA = Reading Amplitude	AG = Amplifier Gain
	AF = Antenna Factor	

## 6.5. Measurement Result:

Operation Mode	Config 1	Test Date	2018/11/22
Test by	Jason	Pol	Vertical



Address: No. 120, Lane 180, Hsin Ho Rd., Lung-Tan Dist.,  
Tao Yuan City 325, Taiwan.  
Tel: 03-4071718

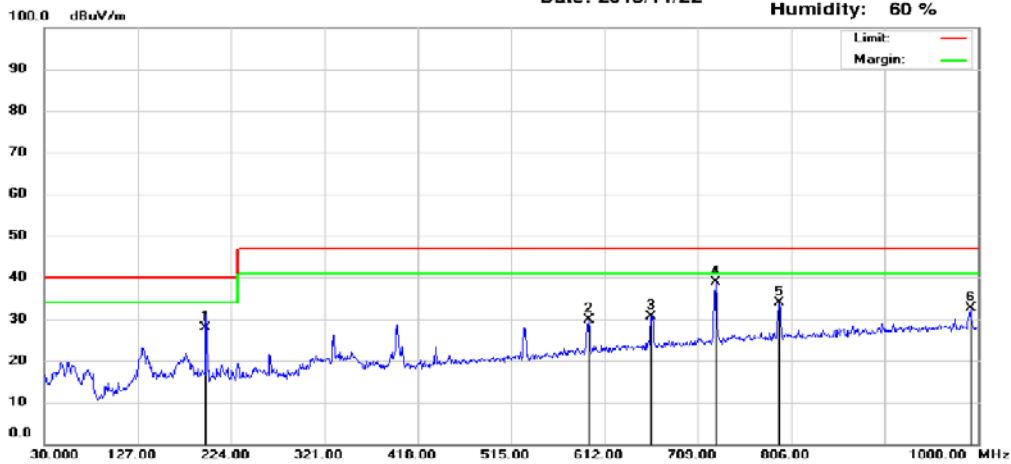
### Radiated Emission Measurement

Date: 2018/11/22

Operator: Elric Chen

Temperature: 26 °C

Humidity: 60 %



Site : Chamber 02

Polarization: Vertical

Mk.	Frequency (MHz)	R <sub>X</sub> R (dBuV)	Correct Factor (dB/m)	Emission (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.Pos (cm)	Tab.Pos (deg.)	Detector
1	198.28	46.50	-18.70	27.80	40.00	-12.20	100	76	peak
2	595.51	37.54	-7.66	29.88	47.00	-17.12	300	181	peak
3	660.50	37.23	-6.54	30.69	47.00	-16.31	250	334	peak
4	727.43	44.19	-5.31	38.88	47.00	-8.12	286	96	peak
5	793.39	38.23	-4.32	33.91	47.00	-13.09	250	282	peak
6	992.24	34.41	-1.81	32.60	47.00	-14.40	200	99	peak





Address: No. 120, Lane 180, Hsin Ho Rd., Lung-Tan Dist.,  
Tao Yuan City 325, Taiwan.  
Tel: 03-4071718

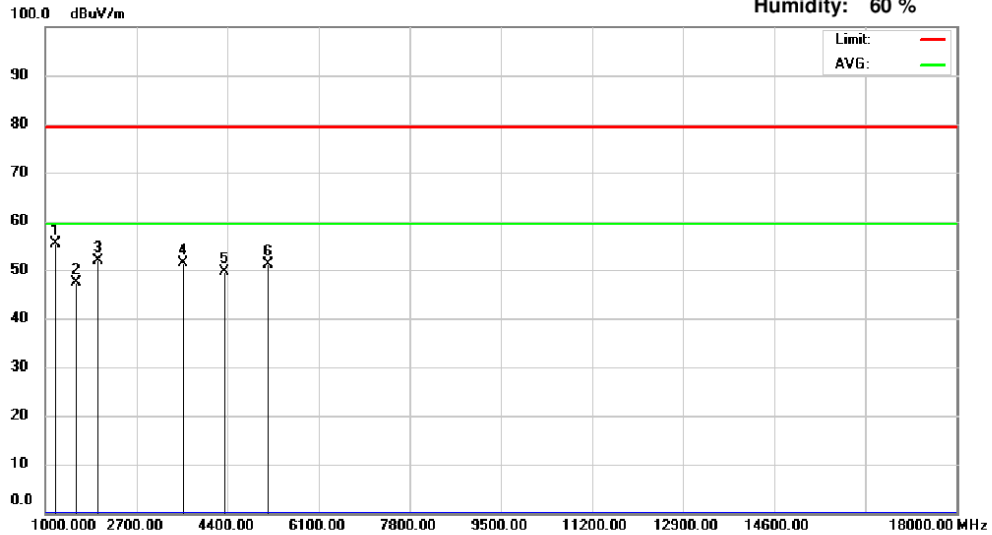
**Radiated Emission Measurement**

Date: 2018/11/23

Operator: Jerry Su

Temperature: 26 °C

Humidity: 60 %



Site : Chamber 14

Polarization: *Vertical*

Mk.	Frequency (MHz)	RX_R (dBuV)	Correct Factor(dB/m)	Emission (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.Pos (cm)	Tab.Pos (deg.)	Detector
1	1187.00	62.33	-7.05	55.28	79.50	-24.22	100	203	peak
2	1578.00	52.62	-5.35	47.27	79.50	-32.23	100	184	peak
3	1986.00	53.87	-1.96	51.91	79.50	-27.59	152	187	peak
4	3567.00	50.39	0.87	51.26	79.50	-28.24	100	199	peak
5	4349.00	47.01	2.57	49.58	79.50	-29.92	100	223	peak
6	5148.00	47.60	3.41	51.01	79.50	-28.49	100	219	peak

Operation Mode	Config 1	Test Date	2018/11/22
Test by	Jason	Pol	Horizontal



Address: No. 120, Lane 180, Hsin Ho Rd., Lung-Tan Dist.,  
Tao Yuan City 325, Taiwan.  
Tel: 03-4071718

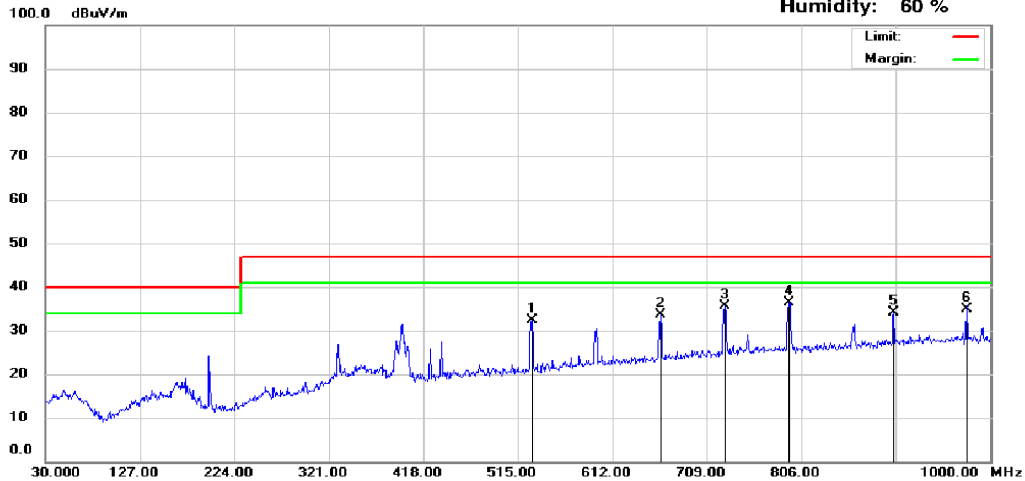
**Radiated Emission Measurement**

Date: 2018/11/22

Operator: Elric Chen

Temperature: 26 °C

Humidity: 60 %



Site : Chamber 02

Polarization: *Horizontal*

Mk.	Frequency (MHz)	RX_R (dBuV)	Correct Factor(dB/m)	Emission (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.Pos (cm)	Tab.Pos (deg.)	Detector
1	529.55	41.72	-9.23	32.49	47.00	-14.51	150	43	peak
2	661.47	40.12	-6.53	33.59	47.00	-13.41	100	108	peak
3	727.43	40.98	-5.31	35.67	47.00	-11.33	100	104	peak
4	793.39	40.66	-4.32	36.34	47.00	-10.66	282	26	peak
5	901.06	37.22	-3.06	34.16	47.00	-12.84	100	325	peak
6	974.95	37.00	-2.02	34.98	47.00	-12.02	100	240	peak



Address: No. 120, Lane 180, Hsin Ho Rd., Lung-Tan Dist.,  
Tao Yuan City 325, Taiwan.  
Tel: 03-4071718

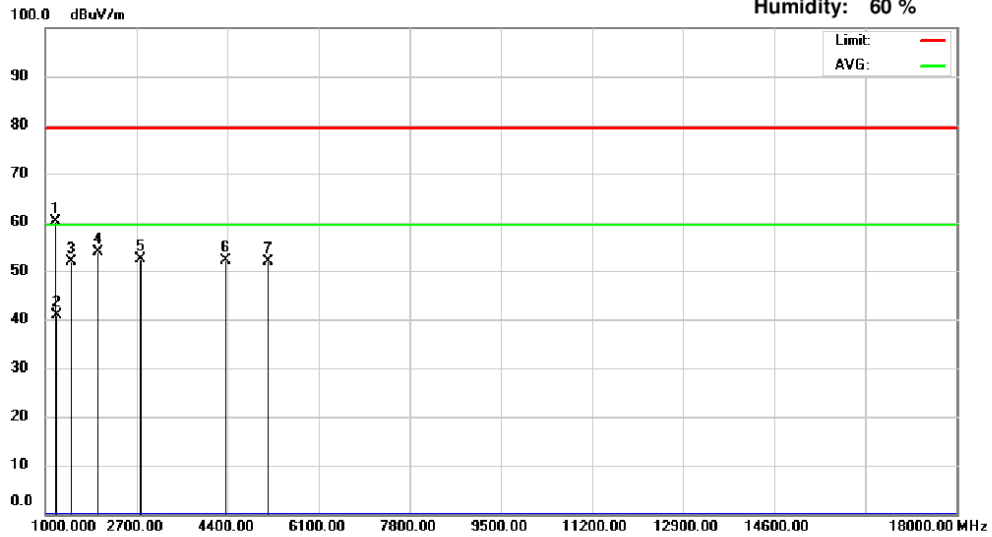
**Radiated Emission Measurement**

Date: 2018/11/23

Operator: Jerry Su

Temperature: 26 °C

Humidity: 60 %



Site : Chamber 14

Polarization: *Horizontal*

Mk.	Frequency (MHz)	RX_R (dBuV)	Correct Factor (dB/m)	Emission (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.Pos (cm)	Tab.Pos (deg.)	Detector
1	1187.00	67.28	-7.05	60.23	79.50	-19.27	149	165	peak
2	1189.86	47.95	-7.05	40.90	59.50	-18.60	100	226	AVG
3	1493.00	57.97	-6.03	51.94	79.50	-27.56	100	338	peak
4	1986.00	55.78	-1.96	53.82	79.50	-25.68	149	223	peak
5	2768.00	52.82	-0.37	52.45	79.50	-27.05	100	170	peak
6	4366.00	49.44	2.60	52.04	79.50	-27.46	100	167	peak
7	5148.00	48.53	3.41	51.94	79.50	-27.56	100	170	peak

Operation Mode	Config 2	Test Date	2018/11/22
Test by	Jason	Pol	Vertical



Address: No. 120, Lane 180, Hsin Ho Rd., Lung-Tan Dist.,  
Tao Yuan City 325, Taiwan.  
Tel: 03-4071718

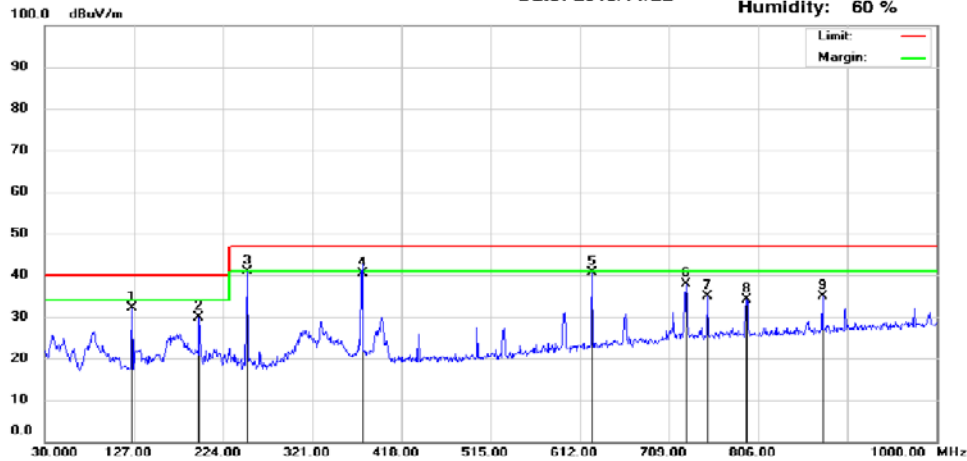
**Radiated Emission Measurement**

Date: 2018/11/22

Operator: Eric Chen

Temperature: 26 °C

Humidity: 60 %



Site : Chamber 02

Polarization: *Vertical*

Mk.	Frequency (MHz)	RX R (dBuV)	Correct Factor (dB/m)	Emission (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant. Pos (cm)	Tab. Pos (deg.)	Detector
1	125.06	49.95	-17.86	32.09	40.00	-7.91	150	139	peak
2	197.81	48.56	-18.67	29.89	40.00	-10.11	150	98	peak
3	250.19	57.28	-16.52	40.76	47.00	-6.24	100	181	peak
4	375.02	53.09	-12.78	40.31	47.00	-6.69	100	15	peak
5	625.58	47.68	-7.10	40.58	47.00	-6.42	300	242	peak
6	727.43	43.12	-5.31	37.81	47.00	-9.19	200	178	peak
7	750.71	39.60	-4.71	34.89	47.00	-12.11	200	267	peak
8	793.39	38.34	-4.32	34.02	47.00	-12.98	250	89	peak
9	875.84	38.37	-3.47	34.90	47.00	-12.10	200	101	peak

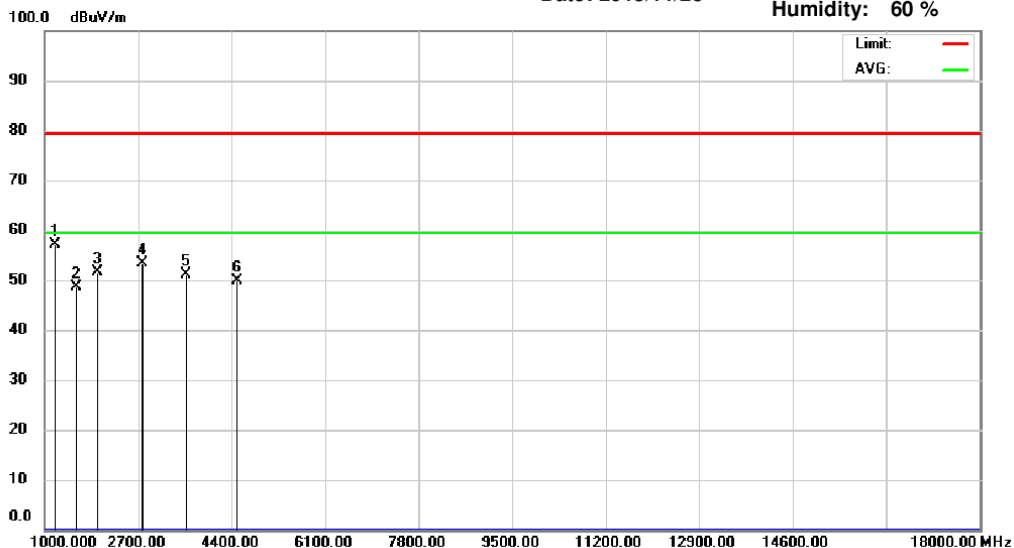


Address: No. 120, Lane 180, Hsin Ho Rd., Lung-Tan Dist.,  
Tao Yuan City 325, Taiwan.  
Tel: 03-4071718

**Radiated Emission Measurement**

Date: 2018/11/23

Operator: Jerry Su  
Temperature: 26 °C  
Humidity: 60 %



Site : Chamber 14

Polarization: **Vertical**

Mk.	Frequency (MHz)	RX_R (dBuV)	Correct Factor(dB/m)	Emission (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.Pos (cm)	Tab.Pos (deg.)	Detector
1	1187.00	64.17	-7.05	57.12	79.50	-22.38	152	177	peak
2	1578.00	54.01	-5.35	48.66	79.50	-30.84	152	196	peak
3	1969.00	53.65	-2.10	51.55	79.50	-27.95	152	196	peak
4	2768.00	53.67	-0.37	53.30	79.50	-26.20	152	212	peak
5	3567.00	50.16	0.87	51.03	79.50	-28.47	100	210	peak
6	4502.00	47.03	2.89	49.92	79.50	-29.58	152	56	peak

Operation Mode	Config 1	Test Date	2018/11/22
Test by	Jason	Pol	Horizontal



Address: No. 120, Lane 180, Hsin Ho Rd., Lung-Tan Dist.,  
Tao Yuan City 325, Taiwan.  
Tel: 03-4071718

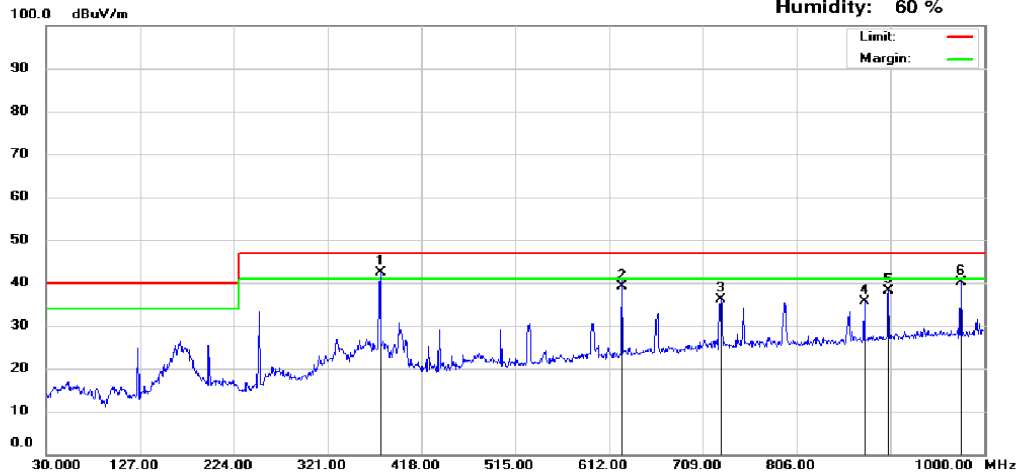
**Radiated Emission Measurement**

Date: 2018/11/22

Operator: Elric Chen

Temperature: 26 °C

Humidity: 60 %



Site : Chamber 02

Polarization: *Horizontal*

Mk.	Frequency (MHz)	RX_R (dBuV)	Correct Factor(dB/m)	Emission (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.Pos (cm)	Tab.Pos (deg.)	Detector
1	375.32	55.08	-12.77	42.31	47.00	-4.69	100	190	peak
2	625.04	46.34	-7.11	39.23	47.00	-7.77	140	231	peak
3	727.43	41.32	-5.31	36.01	47.00	-10.99	100	282	peak
4	875.84	39.01	-3.47	35.54	47.00	-11.46	100	215	peak
5	901.06	41.16	-3.06	38.10	47.00	-8.90	300	91	peak
6	975.75	42.09	-2.01	40.08	47.00	-6.92	100	83	peak



Address: No. 120, Lane 180, Hsin Ho Rd., Lung-Tan Dist.,  
Tao Yuan City 325, Taiwan.  
Tel: 03-4071718

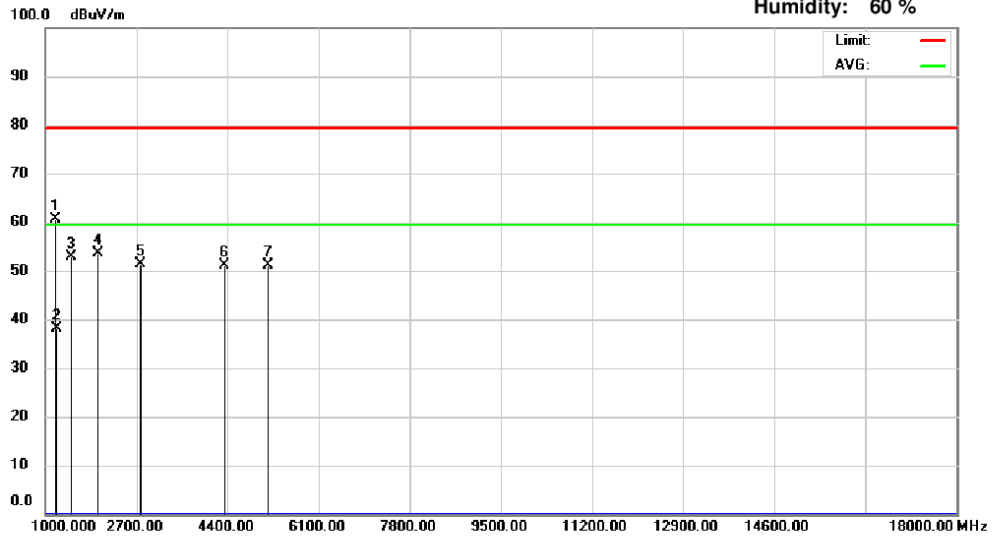
**Radiated Emission Measurement**

Date: 2018/11/23

Operator: Jerry Su

Temperature: 26 °C

Humidity: 60 %



Site : Chamber 14

Polarization: *Horizontal*

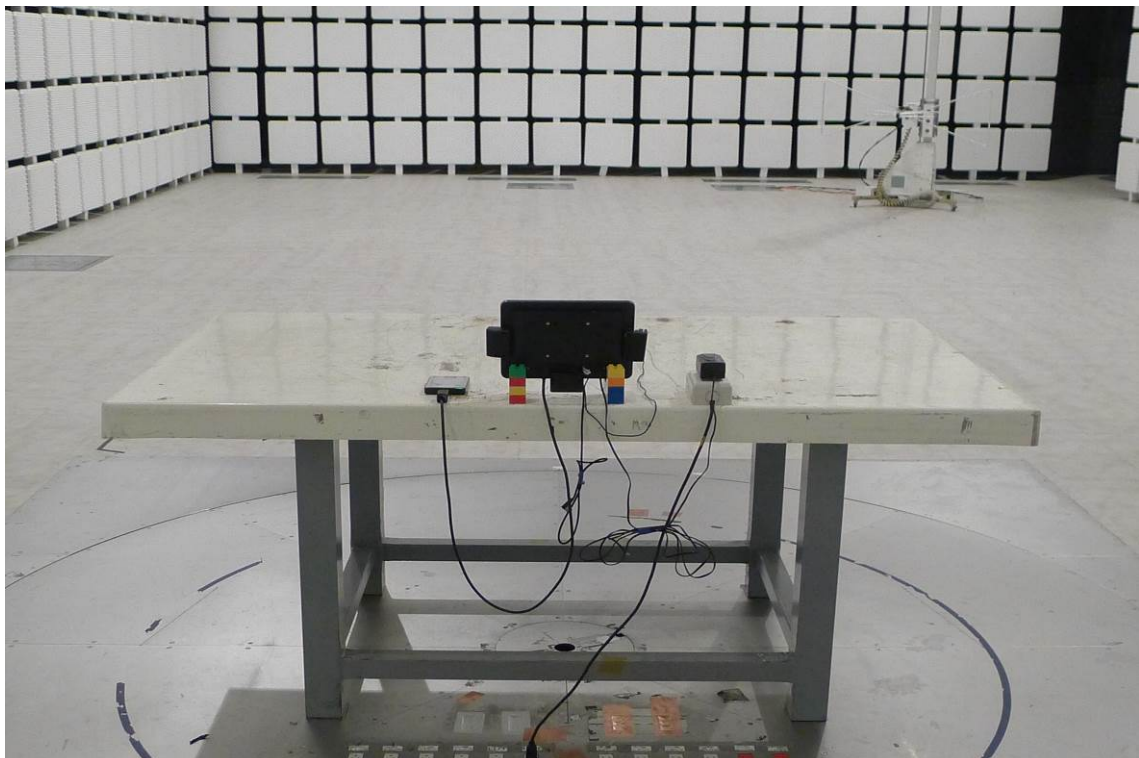
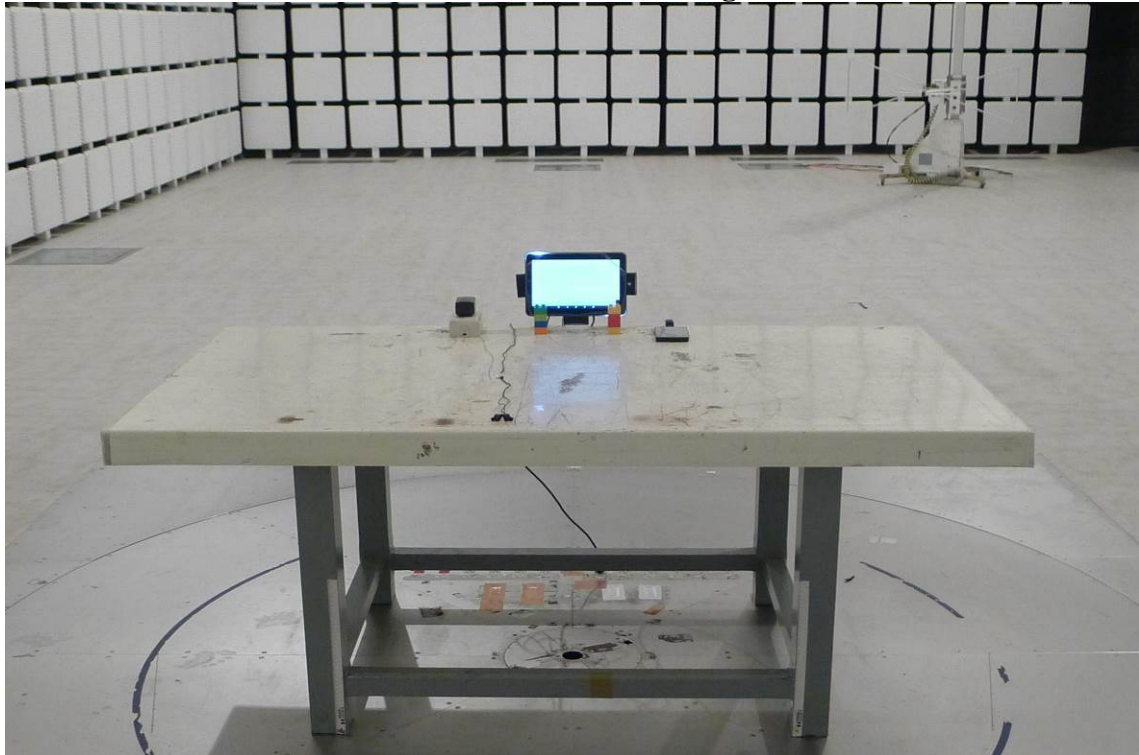
Mk.	Frequency (MHz)	RX_R (dBuV)	Correct Factor(dB/m)	Emission (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.Pos (cm)	Tab.Pos (deg.)	Detector
1	1187.00	67.57	-7.05	60.52	79.50	-18.98	148	152	peak
2	1190.00	45.22	-7.05	38.17	59.50	-21.33	193	169	AVG
3	1493.00	58.91	-6.03	52.88	79.50	-26.62	200	326	peak
4	1986.00	55.70	-1.96	53.74	79.50	-25.76	100	212	peak
5	2768.00	51.83	-0.37	51.46	79.50	-28.04	148	167	peak
6	4349.00	48.54	2.57	51.11	79.50	-28.39	148	226	peak
7	5148.00	47.70	3.41	51.11	79.50	-28.39	148	167	peak

# **APPENDIX 1**

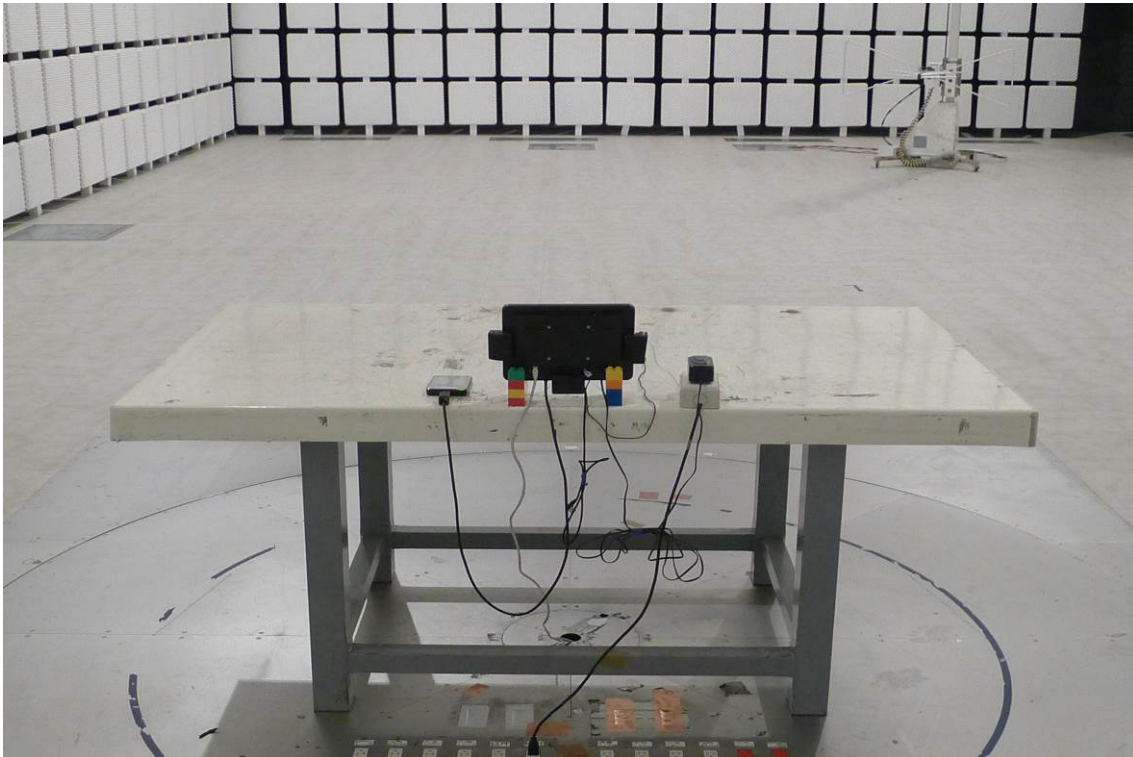
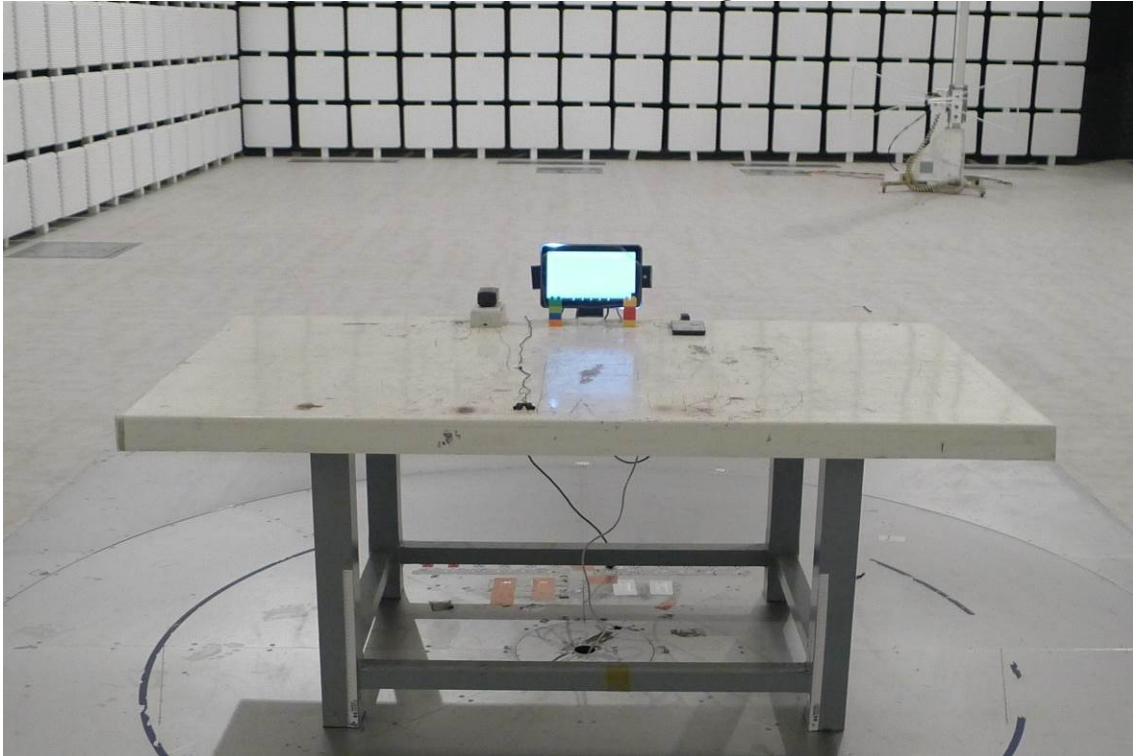
## **Photographs of Set Up**



**RADIATED EMISSION TEST (Config 1 under 1GHz)**

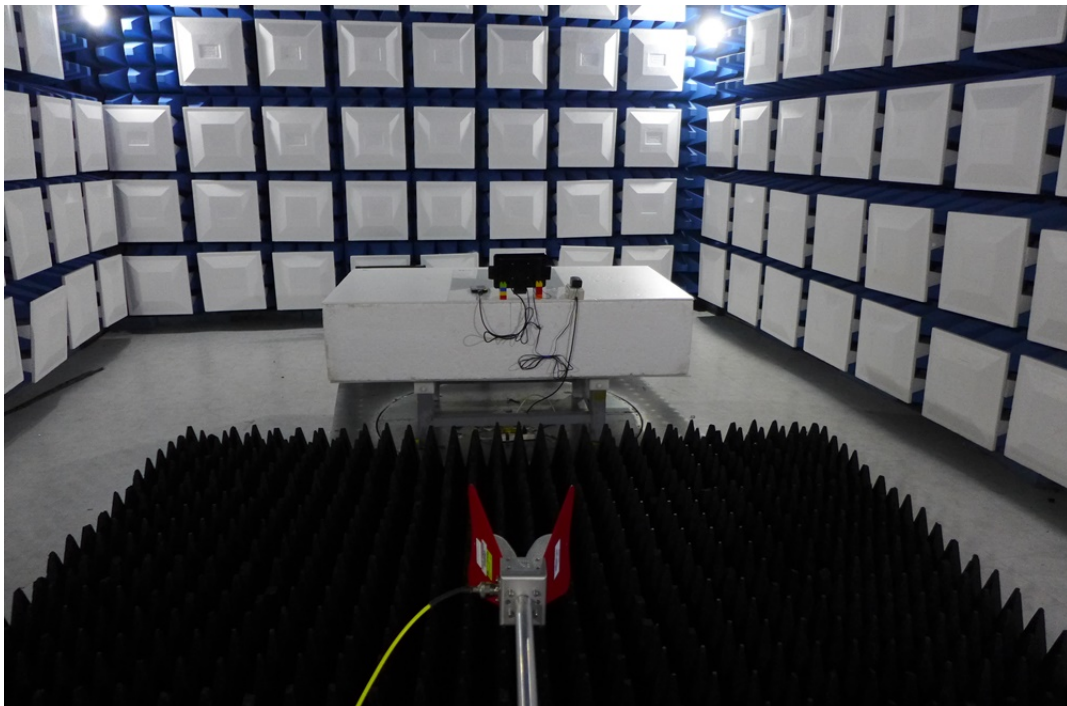
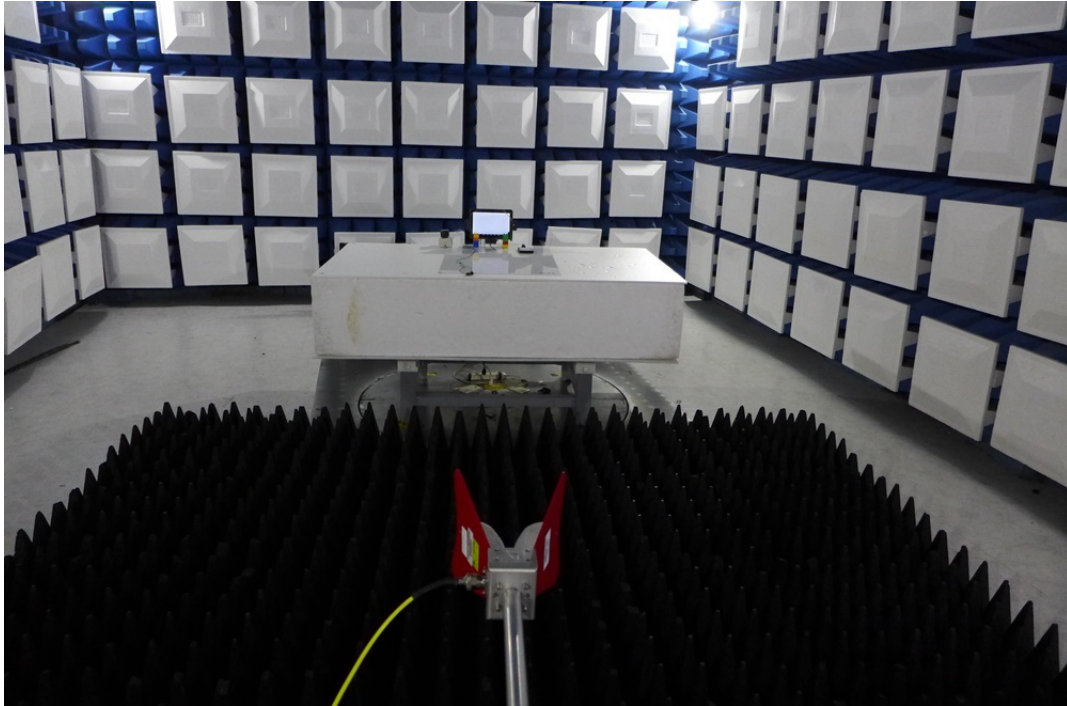


**RADIATED EMISSION TEST (Config 2 under 1GHz)**

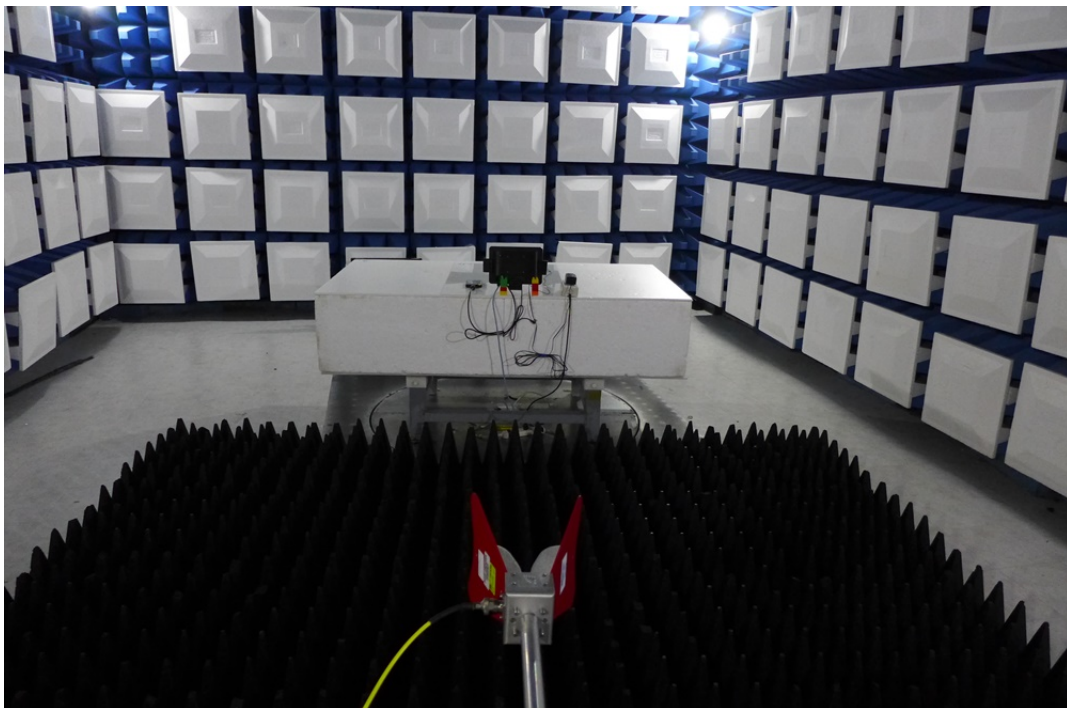
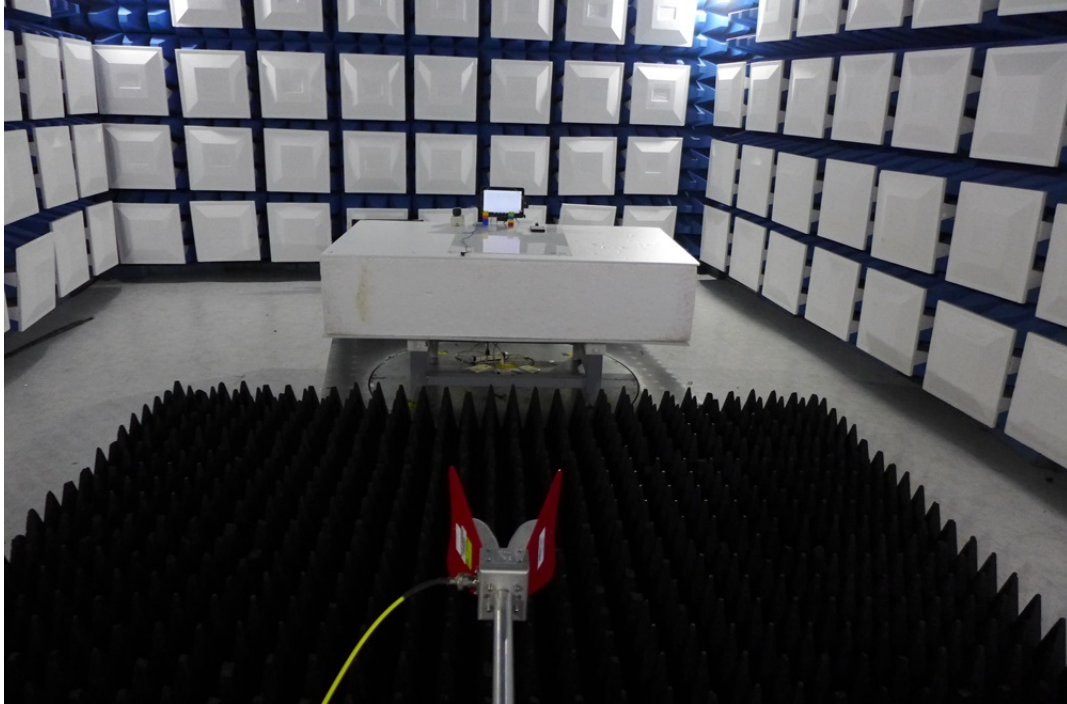




**RADIATED EMISSION TEST (Config 1 above 1GHz)**

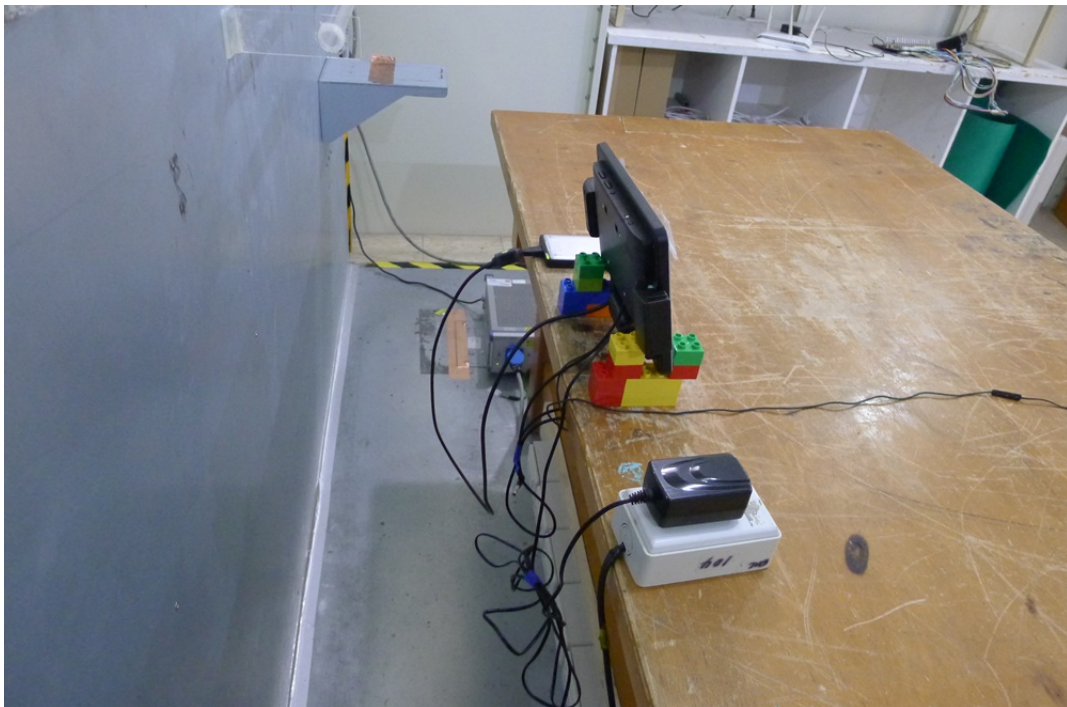


**RADIATED EMISSION TEST (Config 2 above 1GHz)**





### Conducted Emission Setup Photos



## **APPENDIX 2**

### **Photographs of EUT**

***EUT 1***



***EUT 2***



**EUT 3**



**EUT 4**





***EUT 5***



***EUT 6***



**EUT 7    Model : 2ABL024F US**



**EUT 8    Model : SOY-1200200**





**EUT 9 Model : SOY-1200200**



**EUT 10 Model : ZZU1588-200120**



**EUT 11 Model : ZZU1588-200120**

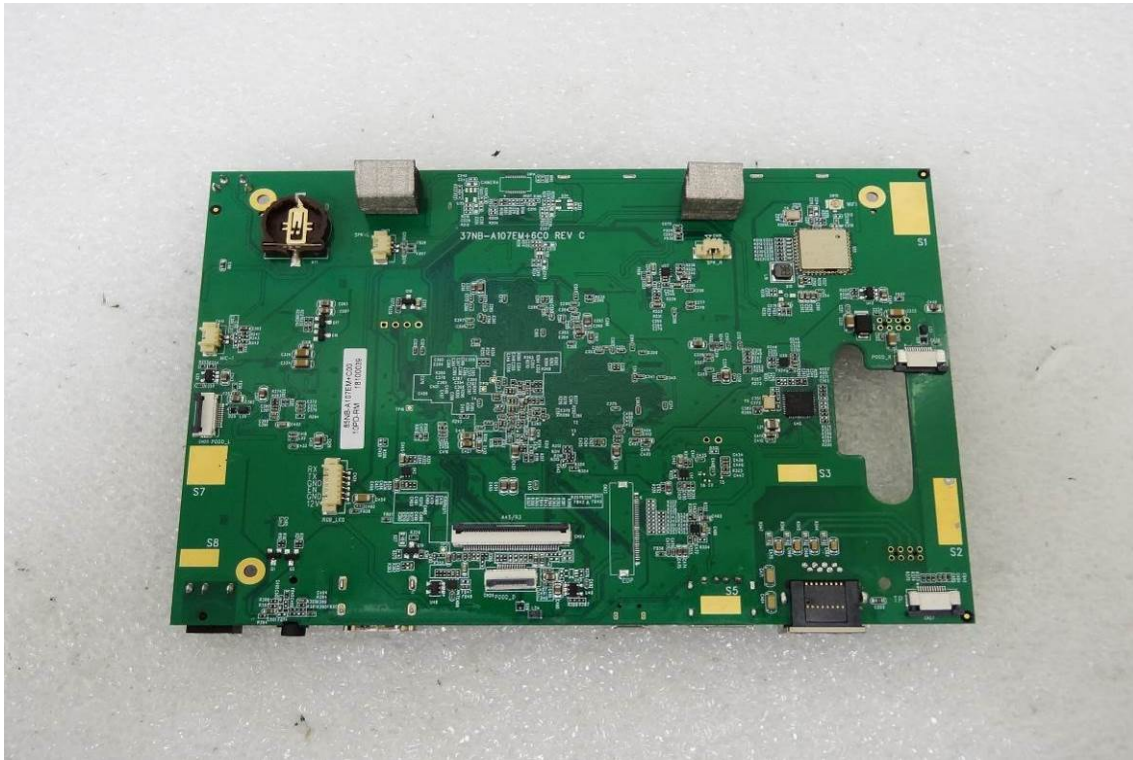


**EUT 12**

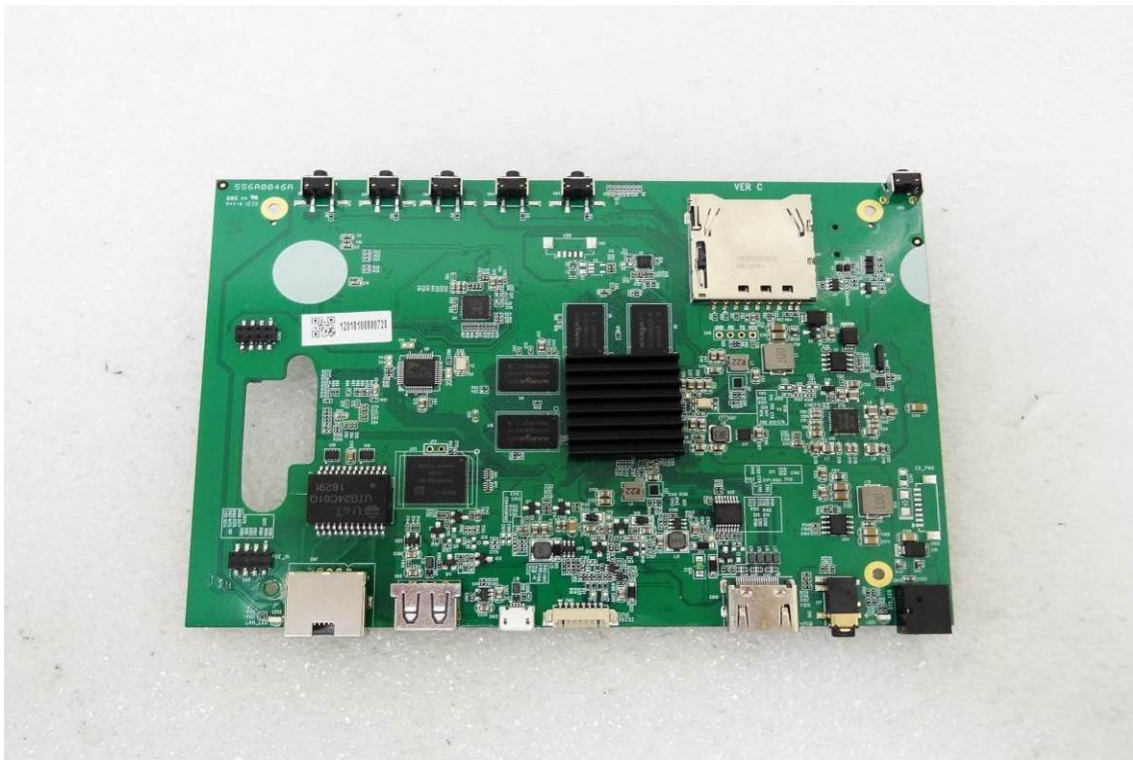




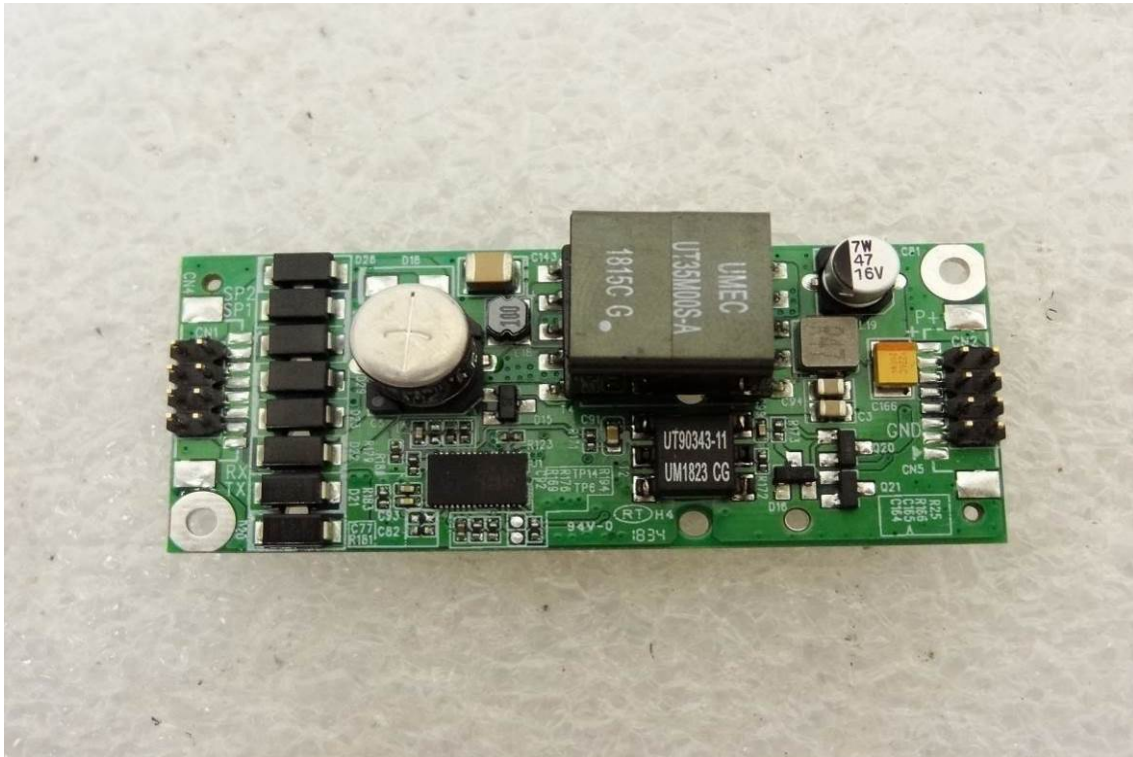
**EUT 13**



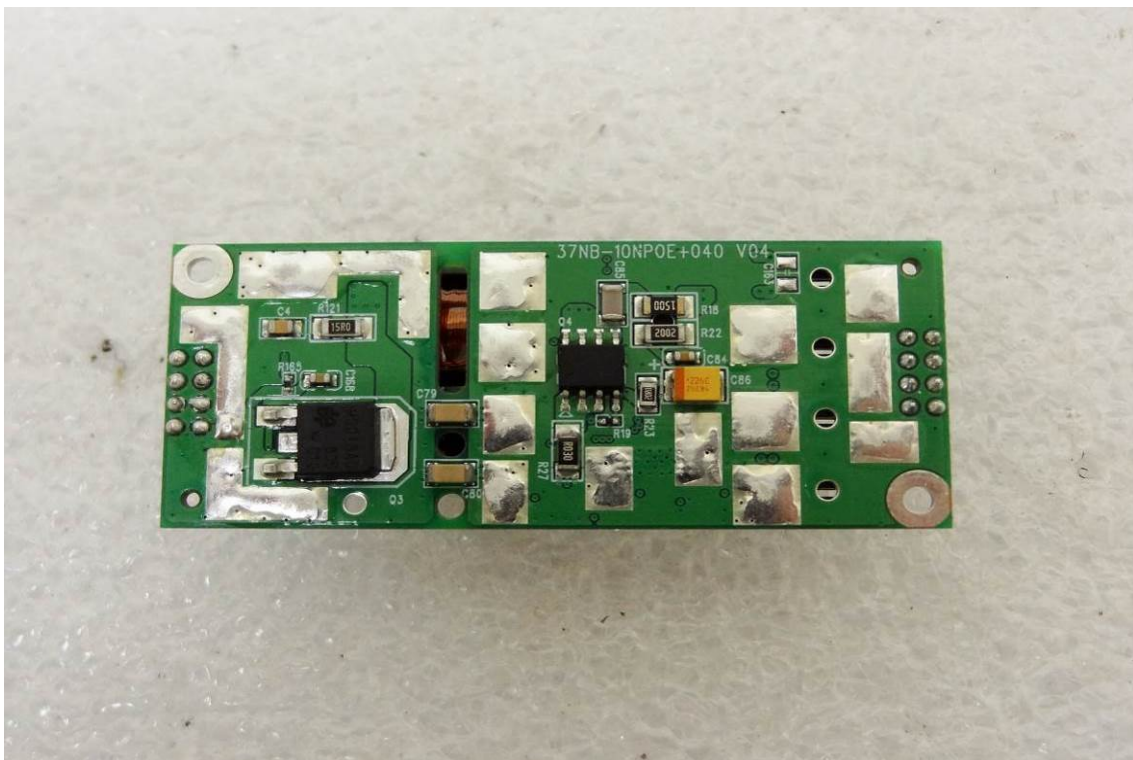
**EUT 14**



**EUT 15**



**EUT 16**



*~ End of Report ~*