Shenzhen Huatongwei International Inspection Co., Ltd.
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FCC REPORT

Report Reference No. ..... :	**TRE1611000803**	R/C…….:90652
FCC ID ..... :	**2ABFV-MVA10**	
Applicant's name ..... :	**PC Smart S.A.**	
Address.....:	Carrera 116 no.15-25, Bogota, Colombia	
Manufacturer.....:	PC Smart S.A.	
Address.....:	Carrera 116 no.15-25, Bogota, Colombia	
Test item description ..... :	**Tablet**	
Trade Mark .....:	PC Smart	
Model/Type reference.....:	PCSGOB10MVA-Series	
List Model .....:	-	
Standard ..... :	**47 CFR FCC Part 15 Subpart B - Unintentional Radiators**	
Date of receipt of test sample……..:	Oct. 21,2016	
Date of testing……:	Oct. 24,2016-Nov.02,2016	
Date of issue……...:	Nov.04,2016	
Result..... ……..:	**Pass**	

Compiled by		
(position+printed name+signature)..:	File administrators Shayne Zhu	Shayne Zhu
Supervised by		
(position+printed name+signature)..:	Project Engineer Jeff Sun	Jeff Sun
Approved by		
(position+printed name+signature)..:	RF Manager Hans Hu	Hans Hu

Testing Laboratory Name ..... :	**Shenzhen Huatongwei International Inspection Co., Ltd.**
Address.....:	1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China

Contents

1. Test standards and Report version

1.1. Test Standards

The tests were performed according to following standards:

47 CFR FCC Part 15 Subpart B - Unintentional Radiators

ANSI C63.4: 2014 – American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40GHz

1.2. Report version

Version No.	Date of issue	Description
00	November 04, 2016	Original

2. Test Description

Test Item	Section in CFR 47	Result
Conducted Emissions	15.107	Pass
Radiated Emission	15.109	Pass

Note: The measurement uncertainty is not included in the test result.

3. Summary

3.1. Client Information

Applicant:	PC Smart S.A.
Address:	Carrera 116 no.15-25,Bogota,Colombia
Manufacturer:	PC Smart S.A.
Address:	Carrera 116 no.15-25,Bogota,Colombia

3.2. Product Description

Name of EUT	Tablet
Trade Mark:	PC Smart
Model No.:	PCSGOB10MVA-Series
List Model:	-
Power supply:	DC 3.7V For internal battery
Adapter information:	-

3.3. EUT operation mode

The EUT has been tested under communication with PC by USB mode.

3.4. EUT configuration

The following peripheral devices and interface cables were connected during the measurement:

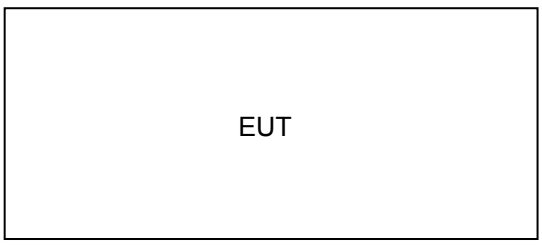
● - supplied by the manufacturer

○ - supplied by the lab

○	PC	Manufacturer :	DELL
		Model No. :	OptiPlex 3020 MT
○	Monitor	Manufacturer :	DELL
		Model No. :	E1912Hf
○	Keyboard	Manufacturer :	DELL
		Model No. :	SK8115
○	Mouse	Manufacturer :	DELL
		Model No. :	MS111-T
○	Printer	Manufacturer :	EPSON
		Model No. :	L101

Note:Peripheral devices comply with FCC DOC approval.

3.5. Configuration of Tested System



4. Test Environment

4.1. Address of the test laboratory

Laboratory:Shenzhen Huatongwei International Inspection Co., Ltd.
Address: 1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China
Phone: 86-755-26748019 Fax: 86-755-26748089

4.2. Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

CNAS-Lab Code: L1225
Shenzhen Huatongwei International Inspection Co., Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2005 General Requirements) for the Competence of Testing and Calibration Laboratories, Date of Registration: February 28, 2015. Valid time is until February 27, 2018.

A2LA-Lab Cert. No. 3902.01
Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing. Valid time is until December 31, 2016.

FCC-Registration No.: 317478
Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Registration 317478, Renewal date Jul. 18, 2014, valid time is until Jul. 18, 2017.

IC-Registration No.: 5377A&5377B
The 3m Alternate Test Site of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 5377A on Dec. 31, 2013, valid time is until Dec. 31, 2016.
Two 3m Alternate Test Site of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 5377B on Dec.03, 2014, valid time is until Dec.03, 2017.

ACA
Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory can also perform testing for the Australian C-Tick mark as a result of our A2LA accreditation.

4.3. Equipments Used during the Test

Conducted Emission					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal.Due
1	EMI Test Receiver	Rohde & Schwarz	ESCI	101247	2016/11/13
2	Artificial Mains	Rohde & Schwarz	NNLK 8121	573	2016/11/13
3	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	101488	2016/11/13
4	Test Software	Rohde & Schwarz	ES-K1	N/A	N/A

Radiated Emission					
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal.Due
1	Ultra-Broadband Antenna	ShwarzBeck	VULB9163	538	2016/11/13
2	EMI Test Receiver	Rohde & Schwarz	ESI 26	100009	2016/11/13
3	EMI Test Software	Audix	E3	N/A	N/A
4	Turntable	MATURO	TT2.0	----	N/A
5	Antenna Mast	MATURO	TAM-4.0-P-12	----	N/A
6	EMI Test Software	Rohde & Schwarz	ESK1	N/A	N/A
7	Ultra-Broadband Antenna	Rohde&Schwarz	HL562	100015	2016/11/13
8	Amplifer	ShwarzBeck	BBV 9743	9743-0022	2016/11/13
9	TURNTABLE	ETS	2088	2149	N/A
10	HORN ANTENNA	Rohde&Schwarz	HF906	100039	2016/11/13

The calibration interval was one year.

4.4. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15~35°C
lative Humidity:	30~60 %
Air Pressure:	950~1050mba

4.5. Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to CISPR 16 - 4 „Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements“ and is documented in the Shenzhen Huatongwei International Inspection Co., Ltd quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Shenzhen Huatongwei laboratory is reported:

Test	Range	Measurement Uncertainty	Notes
Radiated Emission	30~1000MHz	4.24 dB	(1)
Radiated Emission	1~18GHz	5.16 dB	(1)
Radiated Emission	18-40GHz	5.54 dB	(1)
Conducted Disturbance	0.15~30MHz	3.39 dB	(1)

(1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

5. Test Conditions and Results

5.1. Conducted Emissions Test

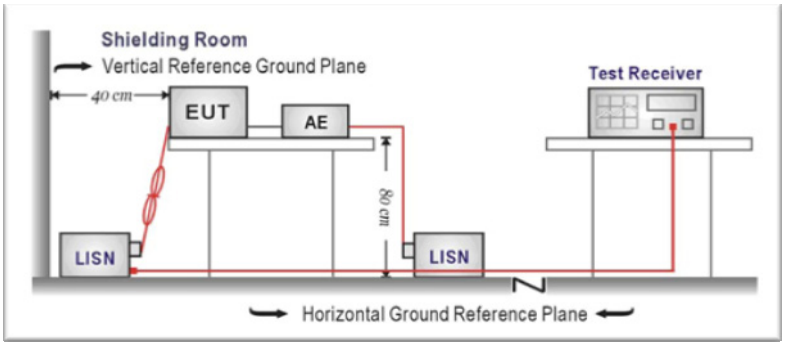
LIMIT

FCC CFR Title 47 Part 15 Subpart B Section 15.107:

Frequency range (MHz)	Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

* Decreases with the logarithm of the frequency.

TEST CONFIGURATION



TEST PROCEDURE

1. The EUT was setup according to ANSI C63.4-2014.
2. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above theconducting ground plane. The vertical conducting plane was located 40 cm to the rear of theEUT. All other surfaces of EUT were at least 80 cm from any other grounded conductingsurface.
3. The EUT and simulators are connected to the main power through a line impedancestabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for themeasuring equipment.
4. The peripheral devices are also connected to the main power through aLISN. (Please refer to the block diagram of the test setup and photographs)
5. Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor,was individually connected through a LISN to the input power source.
6. The excess length of the power cord between the EUT and the LISN receptacle were foldedback and forth at the center of the lead to form a bundle not exceeding 40 cm in length.
7. Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHzusing a receiver bandwidth of 9 kHz.
8. During the above scans, the emissions were maximized by cable manipulation.

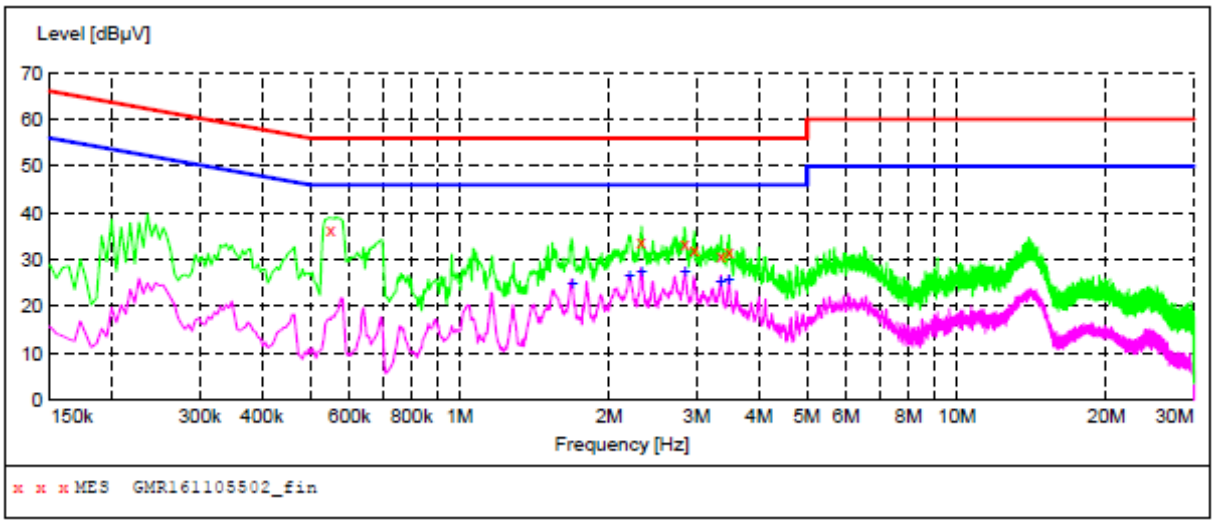
TEST MODE:

Please refer to the clause 3.3

TEST RESULTS

☒ **Passed** ☐ **Not Applicable**

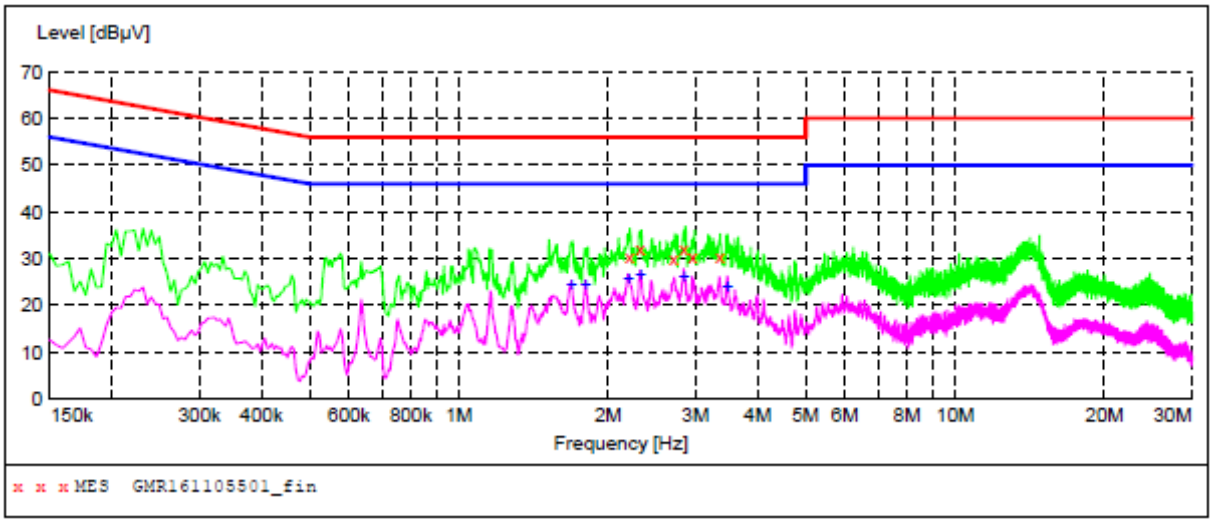
Test Line:	L



Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.550500	36.40	10.2	56	19.6	QP	L1	GND
2.319000	33.90	10.3	56	22.1	QP	L1	GND
2.836500	33.50	10.3	56	22.5	QP	L1	GND
2.962500	32.00	10.3	56	24.0	QP	L1	GND
3.358500	31.00	10.3	56	25.0	QP	L1	GND
3.480000	31.70	10.3	56	24.3	QP	L1	GND

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
1.684500	24.80	10.2	46	21.2	AV	L1	GND
2.193000	26.60	10.2	46	19.4	AV	L1	GND
2.323500	27.50	10.3	46	18.5	AV	L1	GND
2.836500	27.50	10.3	46	18.5	AV	L1	GND
3.349500	25.10	10.3	46	20.9	AV	L1	GND
3.480000	25.50	10.3	46	20.5	AV	L1	GND

Test Line:	N



Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
2.206500	30.40	10.2	56	25.6	QP	N	GND
2.319000	32.30	10.3	56	23.7	QP	N	GND
2.706000	29.80	10.3	56	26.2	QP	N	GND
2.836500	32.20	10.3	56	23.8	QP	N	GND
2.958000	30.20	10.3	56	25.8	QP	N	GND
3.358500	30.40	10.3	56	25.6	QP	N	GND

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
1.684500	24.20	10.2	46	21.8	AV	N	GND
1.801500	24.30	10.2	46	21.7	AV	N	GND
2.197500	25.80	10.2	46	20.2	AV	N	GND
2.323500	26.60	10.3	46	19.4	AV	N	GND
2.836500	26.30	10.3	46	19.7	AV	N	GND
3.480000	24.10	10.3	46	21.9	AV	N	GND

5.2. Radiated Emission Test

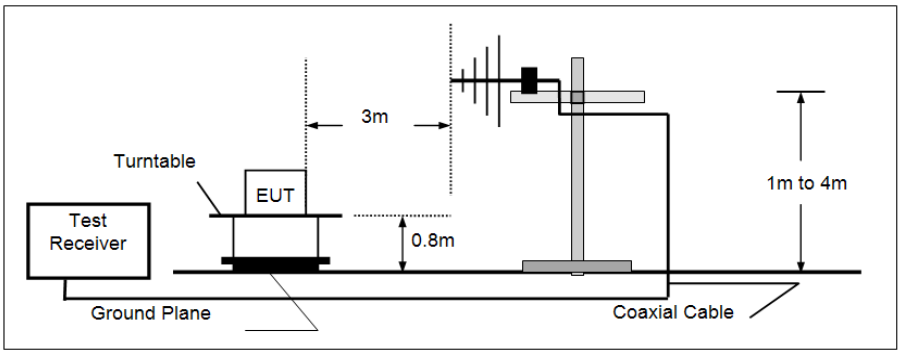
LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.209

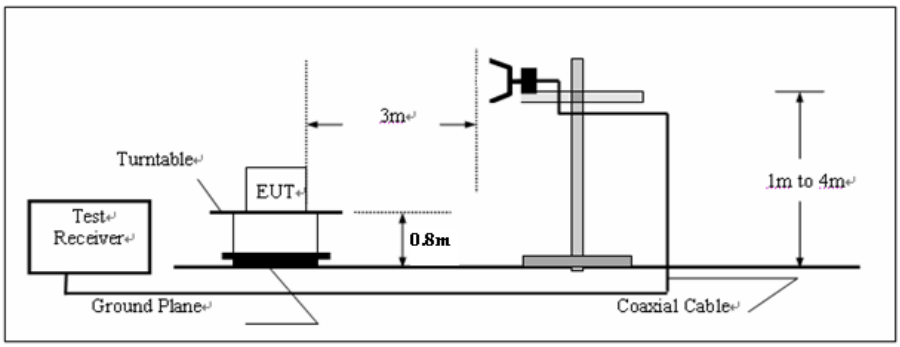
Frequency	Limit (dBuV/m @3m)	Value
30MHz-88MHz	40.00	Quasi-peak
88MHz-216MHz	43.50	Quasi-peak
216MHz-960MHz	46.00	Quasi-peak
960MHz-1GHz	54.00	Quasi-peak
Above 1GHz	54.00	Average
	74.00	Peak

TEST CONFIGURATION

➢ 30MHz ~ 1GHz



➢ Above 1GHz



TEST PROCEDURE

1. The EUT was tested according to ANSI C63.4:2014.
2. The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
3. The EUT waspositioned such that the distance from antenna to the EUT was 3 meters.
4. The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. Thisis repeated for both horizontal and vertical polarization of the antenna.
5. The tested frequency range 30MHz to 25GHz.
6. Use the following spectrum analyzer settings
   (1) Span shall wide enough to fully capture the emission being measured;
   (2) Below 1GHz, RBW=120KHz, VBW=300KHz, Sweep=auto, Detector function=QP, Trace=max hold;
   If the emission level of the EUT measured by the peak detectoris 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, theemission measurement will be repeated using the quasi-peak detector and reported.
   (3) Above 1GHz, RBW=1MHz, VBW=3MHz

TEST MODE:

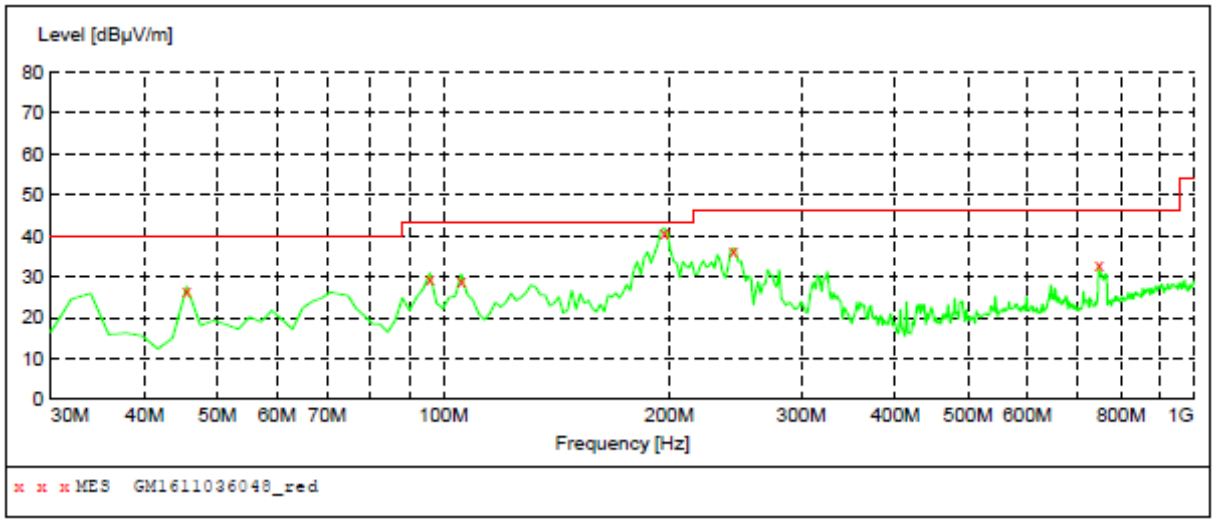
Please refer to the clause 3.3

TEST RESULTS

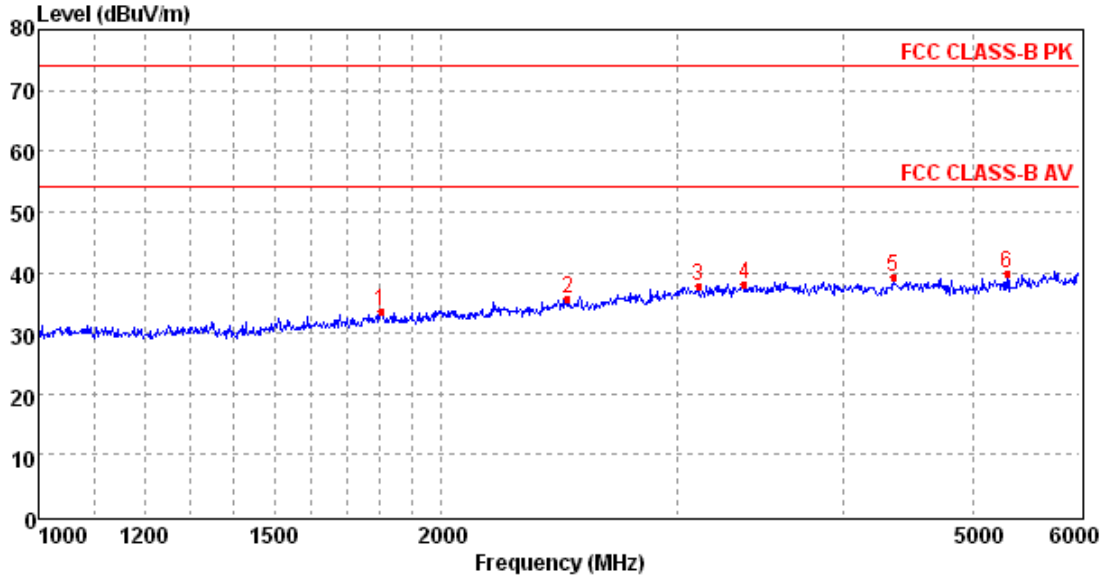
☒ **Passed** ☐ **Not Applicable**

Note: *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*

Polarization:	Horizontal



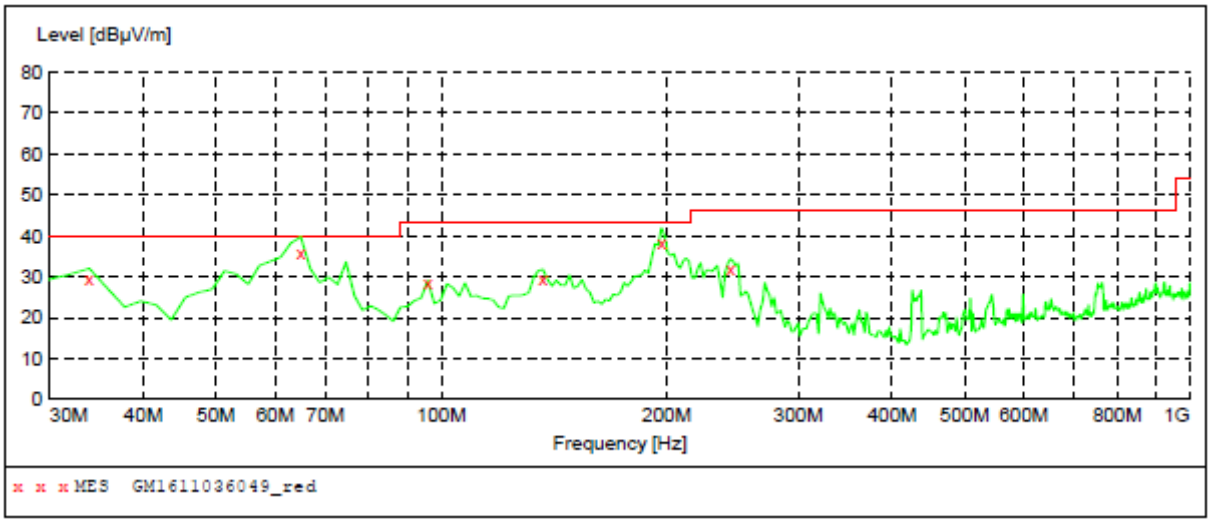
Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
45.520000	27.90	-16.5	40.0	12.1	QP	300.0	360.00	HORIZONTAL
95.960000	29.20	-18.0	43.5	14.3	QP	300.0	69.00	HORIZONTAL
105.660000	28.90	-17.6	43.5	14.6	QP	100.0	254.00	HORIZONTAL
196.840000	40.20	-16.4	43.5	3.3	QP	100.0	172.00	HORIZONTAL
243.400000	37.30	-14.5	46.0	8.7	QP	100.0	279.00	HORIZONTAL
747.800000	32.10	-2.2	46.0	13.9	QP	100.0	219.00	HORIZONTAL



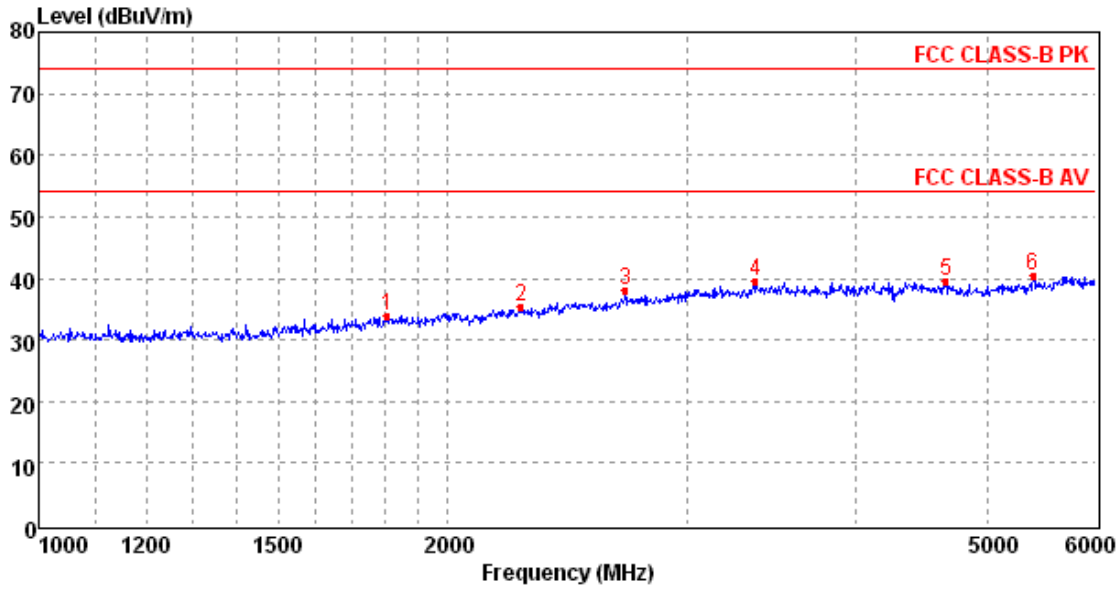
Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	1803.07	39.44	25.60	5.80	37.10	33.74	74.00	-40.26	Peak
2	2484.85	38.52	27.85	6.96	37.65	35.68	74.00	-38.32	Peak
3	3114.21	38.91	28.55	8.33	37.99	37.80	74.00	-36.20	Peak
4	3369.66	38.74	28.65	8.64	37.99	38.04	74.00	-35.96	Peak
5	4353.74	38.17	30.51	8.88	38.24	39.32	74.00	-34.68	Peak
6	5292.74	36.72	31.93	9.51	38.41	39.75	74.00	-34.25	Peak

Note:The frequency range 6GHz to 25GHz no emission found ,only report worse case.

Polarization:	Vertical



Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
33.880000	29.20	-17.9	40.0	10.8	QP	100.0	314.00	VERTICAL
64.920000	36.90	-18.1	40.0	4.9	QP	100.0	34.00	VERTICAL
95.960000	28.20	-18.0	43.5	15.3	QP	100.0	357.00	VERTICAL
136.700000	29.00	-20.1	43.5	14.5	QP	100.0	279.00	VERTICAL
196.840000	38.10	-16.4	43.5	6.6	QP	100.0	254.00	VERTICAL
243.400000	31.60	-14.5	46.0	14.4	QP	100.0	232.00	VERTICAL

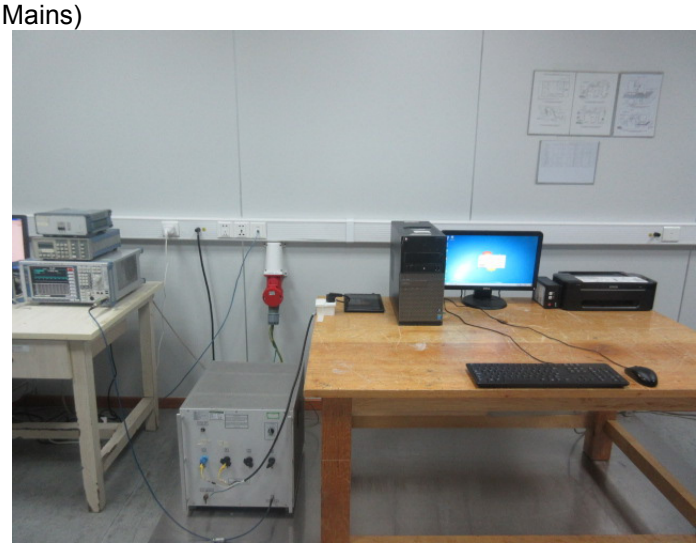


Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	1806.30	39.69	25.61	5.81	37.10	34.01	74.00	-39.99	Peak
2	2263.79	39.01	27.11	6.61	37.48	35.25	74.00	-38.75	Peak
3	2703.17	40.12	28.16	7.49	37.80	37.97	74.00	-36.03	Peak
4	3369.66	40.28	28.65	8.64	37.99	39.58	74.00	-34.42	Peak
5	4652.15	37.81	31.00	9.10	38.44	39.47	74.00	-34.53	Peak
6	5398.09	36.92	32.15	9.57	38.34	40.30	74.00	-33.70	Peak

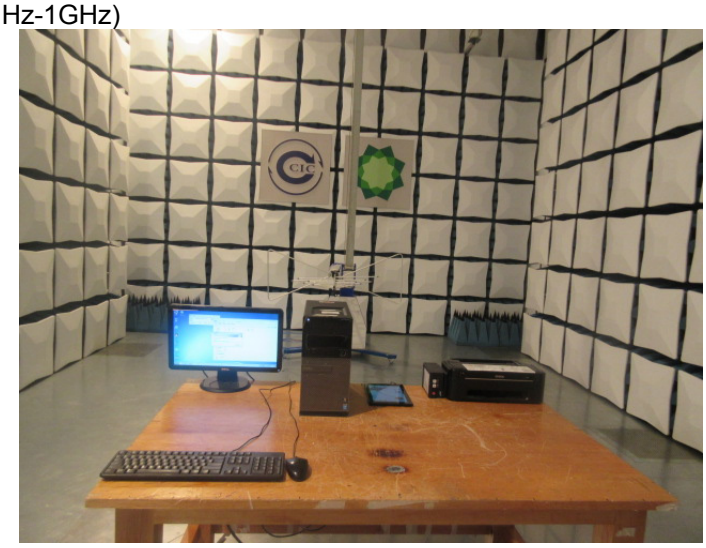
Note:The frequency range 6GHz to 25GHz no emission found ,only report worse case.

6. Test Setup Photos of the EUT

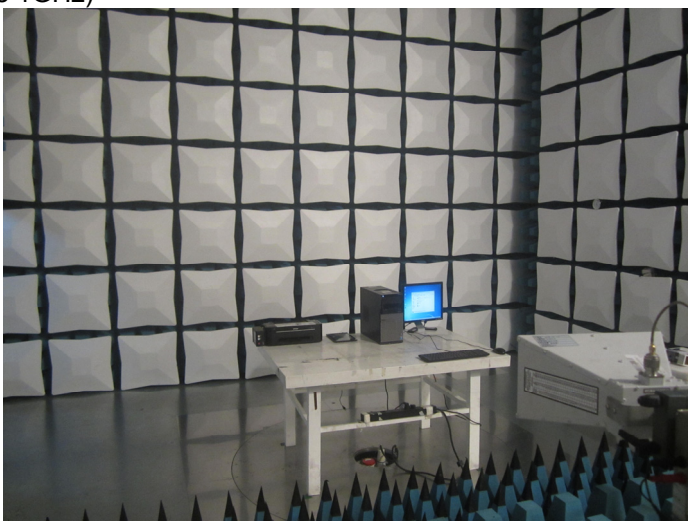
Conducted Emission(AC Mains)



Radiated Emission (30MHz-1GHz)



Radiated Emission (Above 1GHz)



7. External and Internal Photos of the EUT

Reference to Test Report TRE 1611000801

.....End of Report.....