Shenzhen Global Test Service Co., Ltd
No.7-101 and 8A-104, Building 7 and 8, DCC Cultural and Creative Garden, No.98, Pingxin North Road, Shangmugu Community, Pinghu Street, Longgang District, Shenzhen, Guangdong

TEST REPORT

FCC 47 CFR Part 15 Subpart B

Radio Frequency Devices – Unintentional Radiators – Limits and methods of measurement

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 40 GHz

Report Reference No..... :	GTS20250522012-1-01
Date of issue..... :	Jun. 04, 2025
Testing Laboratory Name..... :	**Shenzhen Global Test Service Co.,Ltd.**
Address..... :	No.7-101 and 8A-104, Building 7 and 8, DCC Cultural and Creative Garden, No.98, Pingxin North Road, Shangmugu Community, Pinghu Street, Longgang District, Shenzhen, Guangdong
Supervised by (Testing Engineer)..... :	Archer Liu
Reviewed by (Testing Engineer)..... :	Olive Nie
Approved by (Manager)..... :	Jason Hu
Applicant's name..... :	**SDAPO Communication Co., Ltd.**
Address..... :	5F, W2, Chengxin Building , Tian An Shen Chuang Valley Industrial Center, Fenggang Town, Dongguan City, Guangdong Province, China
Manufacturer's name..... :	**SDAPO Communication Co., Ltd.**
Address..... :	5F, W2, Chengxin Building , Tian An Shen Chuang Valley Industrial Center, Fenggang Town, Dongguan City, Guangdong Province, China
Test specification:	
Standard..... :	**47 CFR FCC Part 15 Subpart B/ANSI C63.4: 2014**
Receiver Date..... :	May 27, 2025
Test Period..... :	May 27, 2025 ~Jun. 04, 2025
Test item description..... :	POE splitter
Trade Mark..... :	SDAPO
Model/Type reference..... :	PS5712TG
Listed Models :	TYPEC0502, PS0502,PS0502-25, USB0502, TYPEC0503, PS0503, PS0503-25, USB0503, PS5712P(3 types), PS5712AT, PS5712AT-25, PS5712AT V2.1, PS5712AT V2.1-25, PS5724AT, PS5724AT-25, PS0502G, PS0502G-25, TYPEC0502G, USB0502G, PS5712G, PS5712G-25, TYPEC5712G, PS5712TG, TYPEC5712TG, PS5712TG-25, PS5712TG-3P, PS5724TG, PS5712BG, PS5712BG-25, TYPEC5712BG, TYPEC0503G, PS0503G, PS0503G-25, USB0503G, TYPEC0504G, PS0504G, PS0504G-25, USB0504G, FS5712B, FS5712W, PS5724AT-RJ, PS5724TG-RJ, PS0504G(metal shell), PS1248G, PS1260G, PS1224G, PS0523G, PS0515G, PS2424G
Ratings..... :	Input: DC 48V 0.6A Output: DC 12V 2A
Result..... :	PASS

TEST REPORT

Test Report No. :	GTS20250522012-1-01	Jun. 04, 2025 Date of issue

Equipment under Test	:	POE splitter
Model /Type	:	PS5712TG
Model List	:	TYPEC0502, PS0502,PS0502-25, USB0502, TYPEC0503, PS0503, PS0503-25, USB0503, PS5712P(3 types), PS5712AT, PS5712AT-25, PS5712AT V2.1, PS5712AT V2.1-25, PS5724AT, PS5724AT-25, PS0502G, PS0502G-25, TYPEC0502G, USB0502G, PS5712G, PS5712G-25, TYPEC5712G, PS5712TG, TYPEC5712TG, PS5712TG-25, PS5712TG-3P, PS5724TG, PS5712BG, PS5712BG-25, TYPEC5712BG, TYPEC0503G, PS0503G, PS0503G-25, USB0503G, TYPEC0504G, PS0504G, PS0504G-25, USB0504G, FS5712B, FS5712W, PS5724AT-RJ, PS5724TG-RJ, PS0504G(metal shell), PS1248G, PS1260G, PS1224G, PS0523G, PS0515G, PS2424G
Model Different	:	All models are the same except for the model name.
Classification of equipment	:	Class B
Highest internal frequency	:	Below 108MHz
Applicant	:	**SDAPO Communication Co., Ltd.**
Address	:	5F, W2, Chengxin Building , Tian An Shen Chuang Valley Industrial Center, Fenggang Town, Dongguan City, Guangdong Province, China
Manufacturer	:	**SDAPO Communication Co., Ltd.**
Address	:	5F, W2, Chengxin Building , Tian An Shen Chuang Valley Industrial Center, Fenggang Town, Dongguan City, Guangdong Province, China

Test Result	**Pass**

The above equipment has been tested by Shenzhen Global Test Service Co., Ltd., and found compliance with the requirements set forth in the technical standards mentioned above. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

Contents

1. TEST SUMMARY

Emission			
Standard	Item	Verdict	Remark
FCC 47 CFR PART 15 SUBPART B ANSI C63.4	Conducted Emission	PASS	Meet Class B limit
FCC 47 CFR PART 15 SUBPART B ANSI C63.4	Radiated Emission	PASS	Meet Class B limit

The test results of this report was related only to the tested sample(s) identified in this report. Manufacturer or whom it may concern should recognize the pass or fail of the test result.

2. EUT INFORMATION

2.1. I/O Port Description

I/O Port Types	Q'TY	Test Description
1). /	/	/

2.1. EUT operation mode

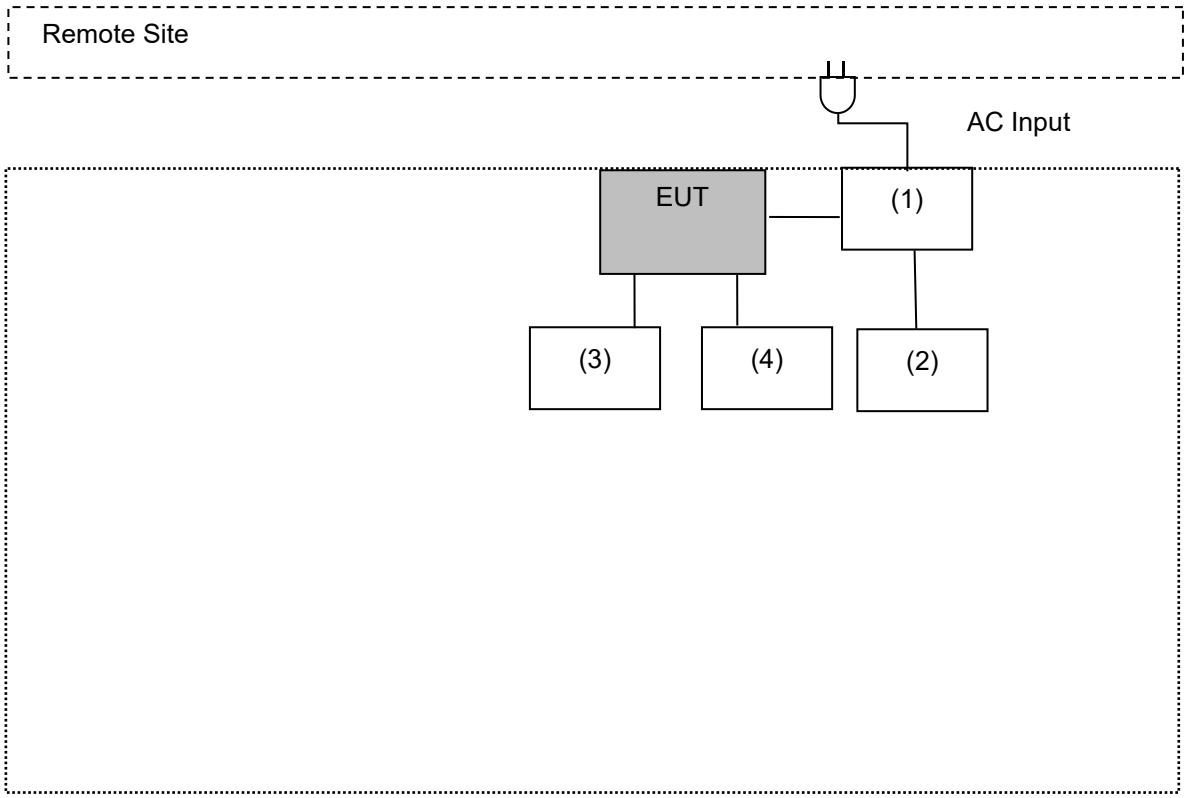
Pre-Test Mode	Mode 1: Charging+Data Transmission		
Final Test Mode	Conducted Emission		Mode 1
	Radiates Emission	Below 1GHz	Mode 1
		Above 1GHz	N/A(The EUT highest internal frequency wsa less than 108MHz)

Then, the above highest emission mode of the configuration of the EUT and cable was chosen for all final test items.

2.2. EUT configuration

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

Mode1



Auxiliary Equipment

Description		Manufacturer	Model Number	Otyr	Remarks
(1)	POE Adapter	Ruide	/	1	/
(2)	Notebook computer	Lenovo	/	1	/
（3）	Notebook computer	Lenovo	/	1	/
（4）	Load	GTS	/	1	/

3. TEST ENVIRONMENT

3.1. Address of the test laboratory

Shenzhen Global Test Service Co., Ltd.
No.7-101 and 8A-104, Building 7 and 8, DCC Cultural and Creative Garden, No.98, Pingxin North Road, Shangmugu Community, Pinghu Street, Longgang District, Shenzhen, Guangdong

3.2. Test Facility

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

CNAS (No. CNAS L8169)
Shenzhen Global Test Service Co., Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC 17025: 2017 General Requirements) for the Competence of Testing and Calibration Laboratories.

A2LA (Certificate No. 4758.01)
Shenzhen Global Test Service Co., Ltd. has been assessed by the American Association for Laboratory Accreditation (A2LA). Certificate No. 4758.01.

3.3. Test Software

Measurement Software			
No.	Description	Software	Version
1	Conducted Emission	JS32-RE	Ver 2.5
2	Radiated Emission _ Below 1GHz	JS32-RE	Ver 2.5.1.8
3	Radiated Emission _ Above 1GHz	JS32-RE	Ver 2.5.1.8

3.4. Statement of the measurement uncertainty

Test Item	Test Site	Frequency Range		Uncertainty (dB)
Conducted Emission AC Power Port	Conductive Shielding Room	9 kHz ~ 150 kHz		1.6
		150 kHz ~ 30 MHz		
Conducted Emission Telecommunication Port		150 kHz ~ 30 MHz		3.6
Radiated Emission	966	30 MHz ~ 1000 MHz	Horizontal	3.95
			Vertical	
		1000 MHz ~ 6000 MHz		4.57
Note: The Vertical and Horizontal measurement uncertainty of 1GHz to 6GHz is evaluated and choose which polarity is worst value.				

3.5. Test Site Environmental

Test Item	Required (IEC 60068-1)		Actual
Conducted Emission	Temperature (°C)	15-35	25
	Humidity (%RH)	25-75	60
	Barometric pressure (mbar)	860-1060	1001
Radiated Emission	Temperature (°C)	15-35	25.1
	Humidity (%RH)	25-75	57.1
	Barometric pressure (mbar)	860-1060	1001

3.6. Test Instruments

Conducted Emission test site					
Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
Test Receiver	R&S	ESPI 3	101841	2024/07/15	1 year
Transient Limiter	CYBERTEK	EM5010A	E1950100106	2024/07/15	1 year
LISN	R&S	ESH2-Z5	893606/008	2024/07/15	1 year
LISN	CYBERTEK	EM5040A	E1850400105	2024/07/15	1 year
ISN	SCHWARZBECK	NTFM 8158	066	2024/07/15	1 year
ISN	SCHWARZBECK	CAT5 8158	121	2024/07/15	1 year
ISN	SCHWARZBECK	CAT3 8158	102	2024/07/15	1 year
Test Site	XINJU	Conductive Shielding Room	N/A	N.C.R.	-----

966 Chamber					
Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
Amplifier	SKET	LAPA 30M01G	SK20240104001	2025/01/21	1 year
Amplifier	EMCI	EMC012645SE	980340	2025/01/21	1 year
Test Receiver	R&S	ESCI 7	101102	2024/07/13	1 year
Spectrum Analyzer	R&S	FSV40-N	101800	2024/07/15	1 year
Broadband Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB 9163	00976	2024/07/15	1 year
Double Ridged Horn Antenna (1~18GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120D	01622	2024/12/16	1 year
Test Site	XINJU	966	N/A	2024/06/16	3 year

4. TEST CONDITIONS AND RESULTS

4.1. Conducted Emission

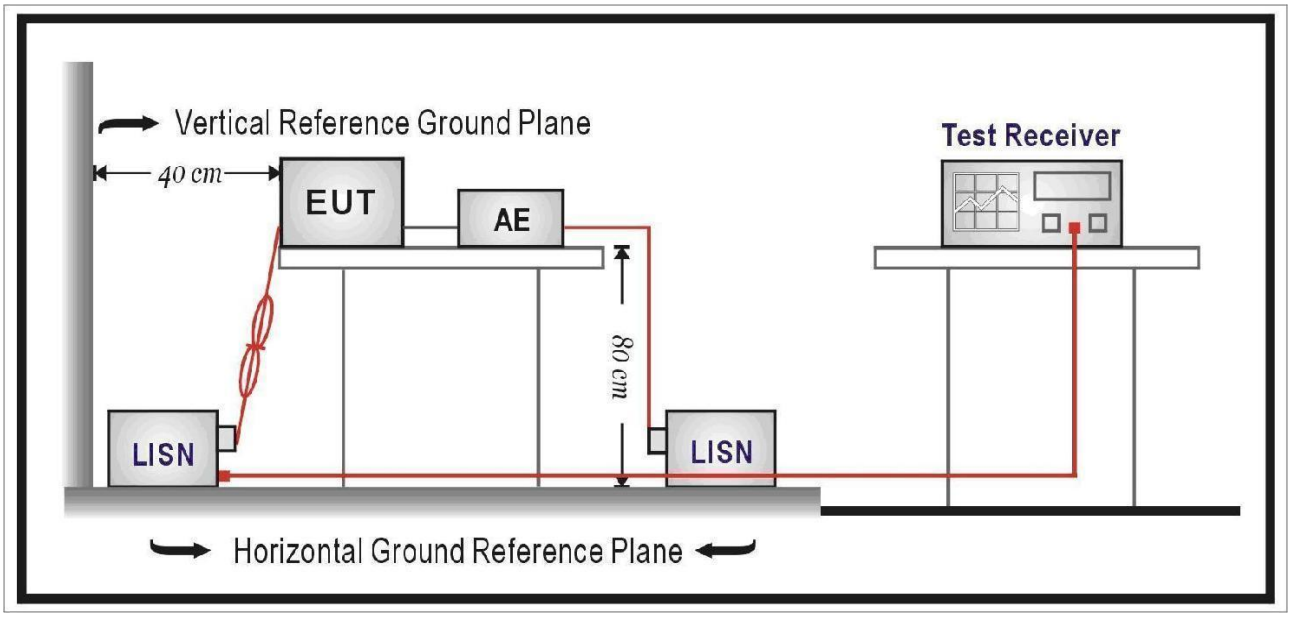
4.1.1. Limits

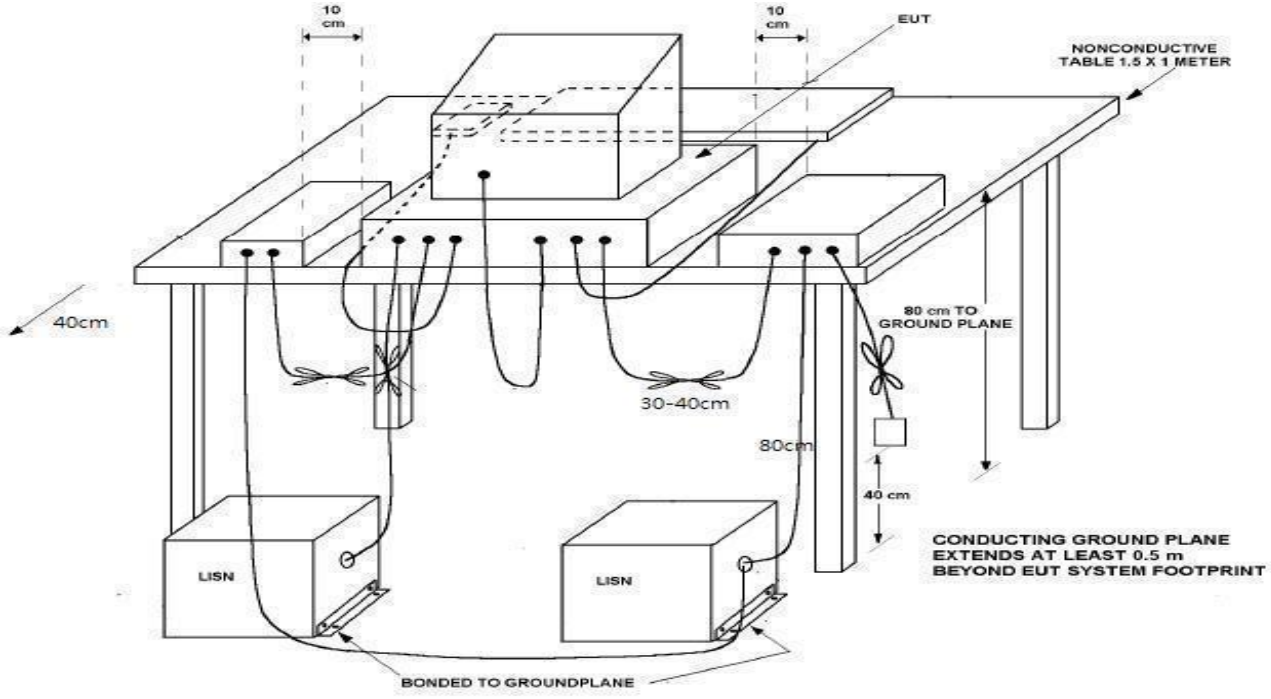
Frequency (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	79	66	66 - 56	56 - 46
0.50 - 5.0	73	60	56	46
5.0 - 30.0	73	60	60	50

Note: (1) The lower limit shall apply at the transition frequencies.

(2) The limit decreases in line with the logarithm of the frequency in the range 0.15 to 0.50 MHz.

4.1.2 Test Configuration





4.1.3 Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 Ω// 50 uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50 Ω// 50 uH coupling impedance with 50 ohm termination.

Tabletop device shall be placed on a non-conducting platform, of nominal size 1 m by 1.5 m, raised 80 cm above the reference ground plane. The wall of screened room shall be located 40 cm to the rear of the EUT. Other surfaces of tabletop or floor standing EUT shall be at least 80 cm from any other ground conducting surface including one or more LISNs. For floor-standing device shall be placed under the EUT with a 12 mm insulating material.

Conducted emissions were investigated over the frequency range from 0.15 MHz to 30 MHz using a resolution bandwidth of 9 kHz. The equipment under test (EUT) shall be meet the limits in section 4.1.1, as applicable, including the average limit and the quasi-peak limit when using respectively, an average detector and quasi-peak detector measured in accordance with the methods described of related standard. When all of peak value were complied with quasi-peak and average limit from 150 kHz to 30 MHz then quasi-peak and average measurement was unnecessary.

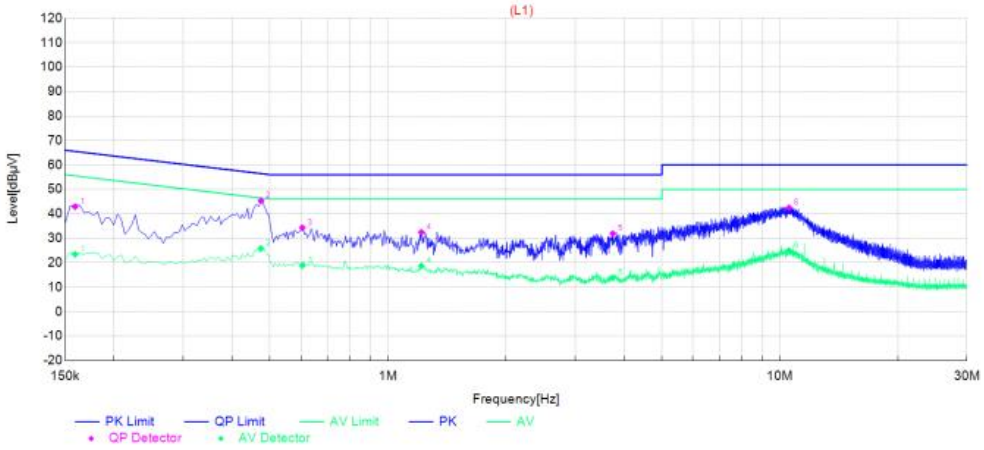
The AMN shall be placed 0,8 m from the boundary of the unit under test and bonded to a ground reference plane for AMNs mounted on top of the ground reference plane. This distance is between the closest points of the AMN and the EUT. All other units of the EUT and associated equipment shall be at least 0,8 m from the AMN. If the mains power cable is longer than 1 m then the cable shall be folded back and forth at the center of the lead to form a bundle no longer than 0.4 m. All of 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. All of EUT and AE shall be separate place more than 0.1 m. All 50 Ω ports of the LISN shall be resistively terminated into 50 Ω loads when not connected to the measuring instrument.

If the reading of the measuring receiver shows fluctuations close to the limit, the reading shall be observed for at least 15 s at each measurement frequency; the higher reading shall be recorded with the exception of any brief isolated high reading which shall be ignored.

4.1.4 Test Results

Note :We tested the all modes,and listed the worst case in the report.

Test Standard:	FCC Part 15B	Power Line:	L1
Test Mode:	Mode 1	Test Power:	AC 120 V/60 Hz
Description:			



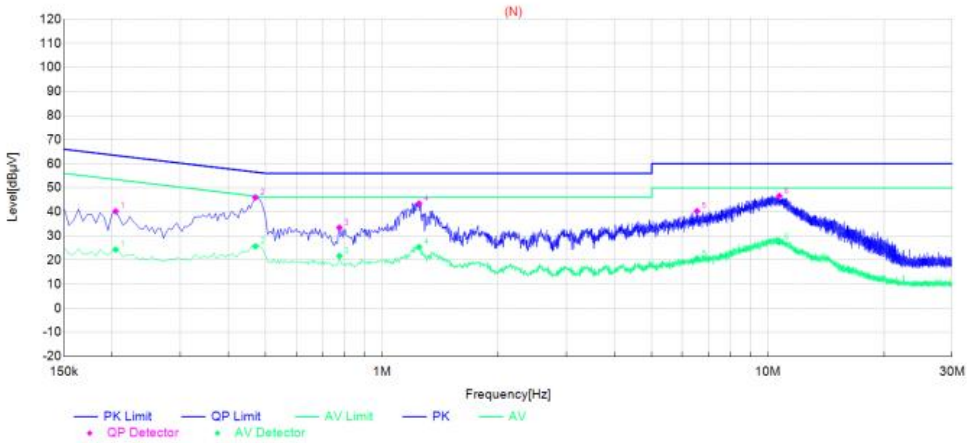
Final Data List

NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.159	32.59	13.12	10.31	42.90	23.43	65.52	55.52	22.62	32.09	L1	PASS
2	0.474	35.12	15.59	10.24	45.36	25.83	56.44	46.44	11.08	20.61	L1	PASS
3	0.6045	24.12	8.66	10.19	34.31	18.85	56.00	46.00	21.69	27.15	L1	PASS
4	1.2165	22.24	8.48	10.22	32.46	18.70	56.00	46.00	23.54	27.30	L1	PASS
5	3.7455	21.57	3.56	10.36	31.93	13.92	56.00	46.00	24.07	32.08	L1	PASS
6	10.554	31.82	14.32	10.66	42.48	24.98	60.00	50.00	17.52	25.02	L1	PASS

Note: 1. Result (dBµV) = Reading (dBµV) + Factor (dB)

2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

Test Standard:	FCC Part 15B	Power Line:	N
Test Mode:	Mode 1	Test Power:	AC 120 V/60 Hz
Description:			



Final Data List

NO.	Frequency	QP Reading	AVG. Reading	Factor	QP Result	AVG. Result	QP Limit	AVG. Limit	QP Margin	AVG. Margin	Line	Remark
1	0.204	30.07	14.23	10.15	40.22	24.38	63.45	53.45	23.23	29.07	N	PASS
2	0.4695	35.75	15.44	10.24	45.99	25.68	56.52	46.52	10.53	20.84	N	PASS
3	0.7755	23.22	11.49	10.25	33.47	21.74	56.00	46.00	22.53	24.26	N	PASS
4	1.248	33.27	15.20	10.22	43.49	25.42	56.00	46.00	12.51	20.58	N	PASS
5	6.549	29.79	10.06	10.50	40.29	20.56	60.00	50.00	19.71	29.44	N	PASS
6	10.7025	35.87	16.73	10.69	46.56	27.42	60.00	50.00	13.44	22.58	N	PASS

Note: 1. Result (dBµV) = Reading (dBµV) + Factor (dB)

2. Factor (dB) = Cable loss (dB) + LISN Factor (dB).

4.2. Radiated Emission

4.2.1 Limit

■ **Below 1 GHz test shall not exceed following value**

FCC 47 CFR PART 15 SUBPART B				
Frequency range (MHz)	Class A		Class B	
	Distance (m)	dBuV/m	Distance (m)	dBuV/m
30 to 88	10	39	3	40
88 to 216	10	43.5	3	43.5
216 to 960	10	46.4	3	46
Above 960	10	49.5	3	54

■ **Above 1 GHz test shall not exceed following value**

Frequency (MHz)	dBuV/m (Distance 3m)			
	Class A		Class B	
	Average	Peak	Average	Peak
1000 ~ 40000	60	80	54	74

Remark:1. The tighter limit shall apply at the edge between two frequency bands.

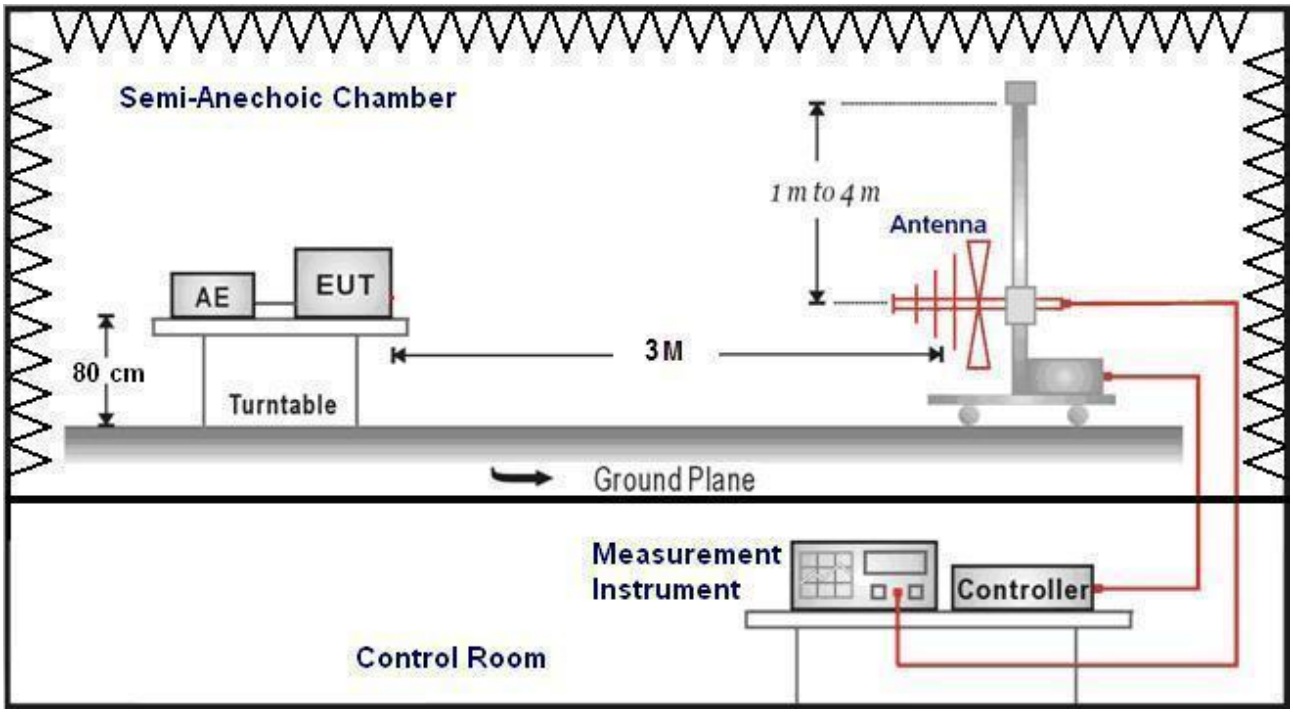
2. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.
3. RF Voltage (dBuV/m) = 20 log RF Voltage (uV/m)
4. Peak detector limit is corresponding to 20 dB above the maximum permitted average limit.

According to FCC Part 15.33 (b), for an unintentional radiator, including a digital device, the spectrum shall be investigated from the lowest radio frequency signal generated or used in the device, without going below the lowest frequency for which a radiated emission limit is specified, up to the frequency shown in the following table:

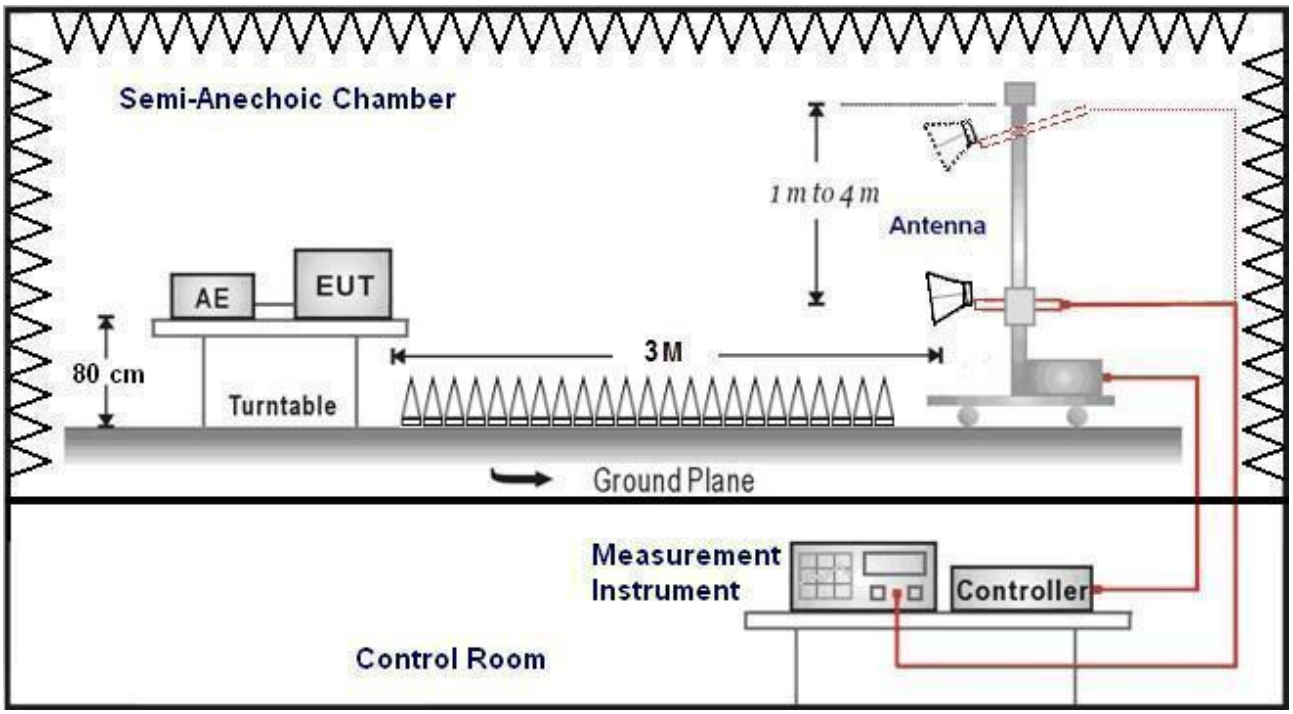
Highest frequency generated or used in the device or in which the device operated or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.75	30
1.75-108	1000
108-500	2000
500-1000	5000
Above 1000	5th harmonic of the highest frequency or 40 GHz, whichever is lower

4.2.2 Test Configuration

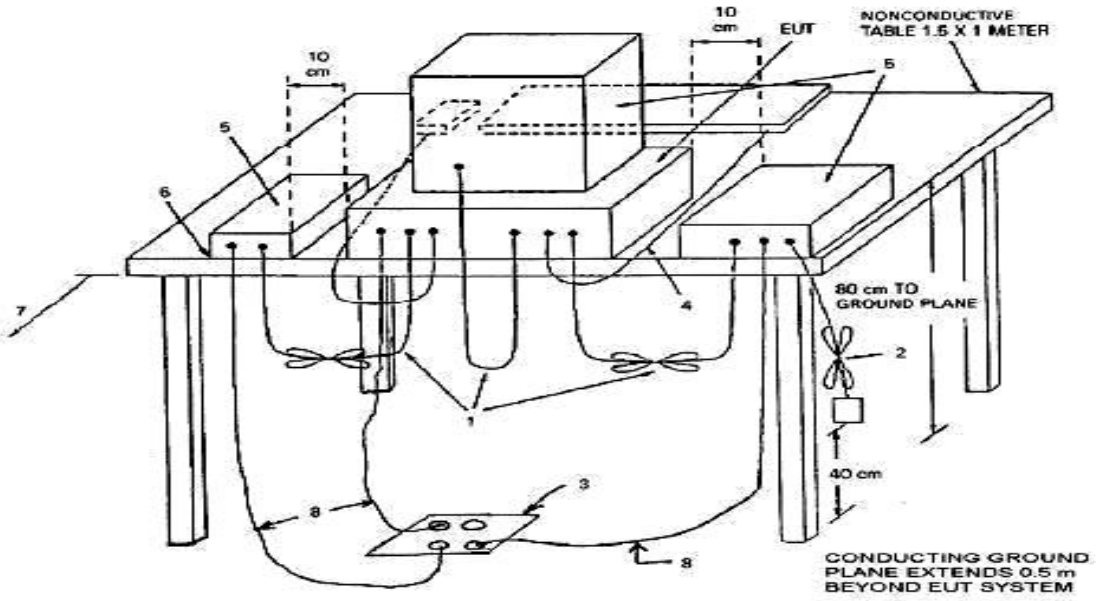
■ Below 1GHz



■ Above 1GHz



Test arrangement for radiated emissions of tabletop equipment.



4.2.3 Test Procedure

■ **Below 1 GHz**

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. When the EUT is floor- standing equipment, it is placed on the ground plane which has a 12 mm non-conductive covering to insulate the EUT from the ground plane.

The turn table is 0.8 m height and 2.0 m wide x 1.0 m deep size. It can rotate 360 degrees to determine the position of the maximum emission level. The spcing between the each equipment was 10 cm. The mains cables are dropped to floor and are round to recepatacle. Interconnecting cables of table top equipment that hang closer than 0.4 m to the ground plane are folded back and forth forming a bundle 0.3 m to 0.4 m long, hanging approximately in the middle between ground plane and table. The EUT was positioned such that the distance from antenna to the EUT was 10 meters and the receive antenna was moved from 1m to 4m to investigate maximum highest emission at least 6 points over the frequency range from 30 MHz to1 GHz using a resolution bandwidth of 120 kHz and measured by the quasi-peak detector.

According to this standard paragraph 15.109, as an alternative to the radiated emission limits, digital devices may be shown to comply with the standards contained in Third Edition of the International Special Committee on Radio Interference (CISPR), Pub. 22, “Information Technology Equipment - Radio Disturbance Characteristics - Limits and Methods of Measurement”.

■ **Above 1 GHz**

The Setup is same as Below 1 GHz placement. The turn table is 0.8 m height and 1.8 m wide x 1.0 m deep size.

The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meter for above 1 GHz, the highest frequency performed according to internal source frequency of the EUT, the specification was below:

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30
1.705 - 108	1000
108 - 500	2000
500 - 1000	5000
Above 1000	5th harmonic of the highest frequency or 40 GHz, whichever is lower

Absorber shall be spread between floor of a turn table and a receive antenna shown in 4.2.3. The antenna used boresight antenna master from 1 meter and 4 meters to find out the maximum emission level and find the highest emission at least 6 points. Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated on radiated measurement.

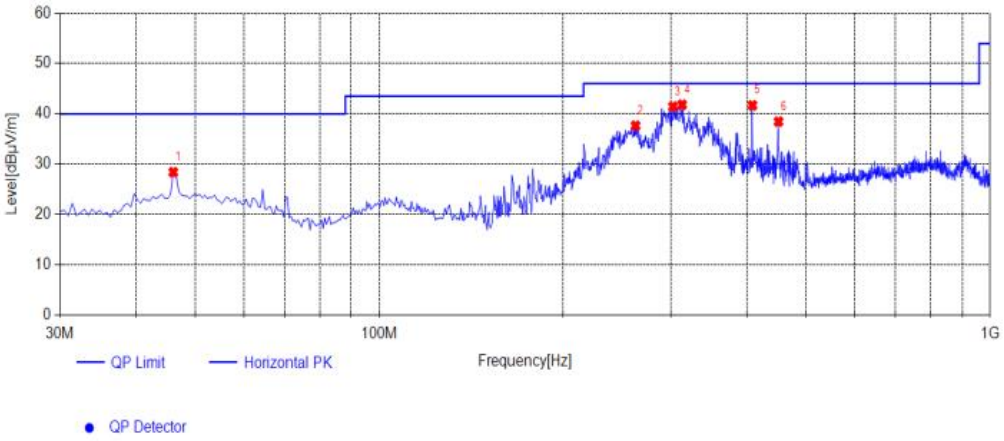
Radiated emissions were applied to above 1 GHz using a resolution bandwidth of 1 MHz and measured by the peak and average detector which antenna to the EUT distance was 3 meters. If the EUT was meet both limits and measurement with the average detector receiver is unnecessary.

4.2.4 Test Results

Note :We tested the all modes, and listed the worst case in the report.

Below 1GHz

Test Standard:	FCC Part 15B	Test Distance:	3 m
Test Mode:	Mode 1	Test Power:	AC 120 V/60 Hz
Measurement Range:	30 MHz~1 GHz	Ant.Polar.:	Horizontal



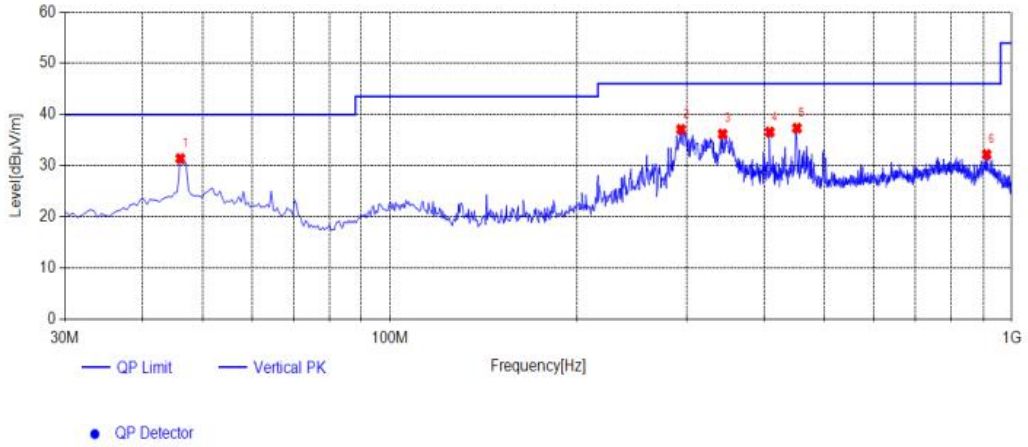
Suspected List

NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	46.005	31.55	-3.15	28.40	40.00	11.60	100	316	PK	Horizonta	PASS
2	262.8	40.37	-2.72	37.65	46.00	8.35	100	286	PK	Horizonta	PASS
3	302.57	43.73	-2.27	41.46	46.00	4.54	100	128	PK	Horizonta	PASS
4	313.24	43.77	-1.95	41.82	46.00	4.18	100	282	PK	Horizonta	PASS
5	408.3	41.00	0.69	41.69	46.00	4.31	100	272	PK	Horizonta	PASS
6	450.495	37.24	1.21	38.45	46.00	7.55	100	162	PK	Horizonta	PASS

Note: 1. Result (dBuV/m) = Reading (dBuV/m) + Factor (dB/m) .

2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) – Pre Amplifier gain (dB).

Test Standard:	FCC Part 15B	Test Distance:	3 m
Test Mode:	Mode 1	Test Power:	AC 120 V/60 Hz
Measurement Range:	30 MHz~1 GHz	Ant.Polar.:	Vertical



Suspected List

NO.	Frequency [MHz]	Reading [dBµV/m]	Factor [dB]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Remark
1	46.005	34.55	-3.15	31.40	40.00	8.60	100	4	PK	Vertical	PASS
2	293.84	39.48	-2.39	37.09	46.00	8.91	100	51	PK	Vertical	PASS
3	342.825	36.95	-0.77	36.18	46.00	9.82	100	10	PK	Vertical	PASS
4	408.3	35.87	0.69	36.56	46.00	9.44	100	10	PK	Vertical	PASS
5	451.465	36.15	1.17	37.32	46.00	8.68	100	10	PK	Vertical	PASS
6	911.245	23.89	8.28	32.17	46.00	13.83	100	253	PK	Vertical	PASS

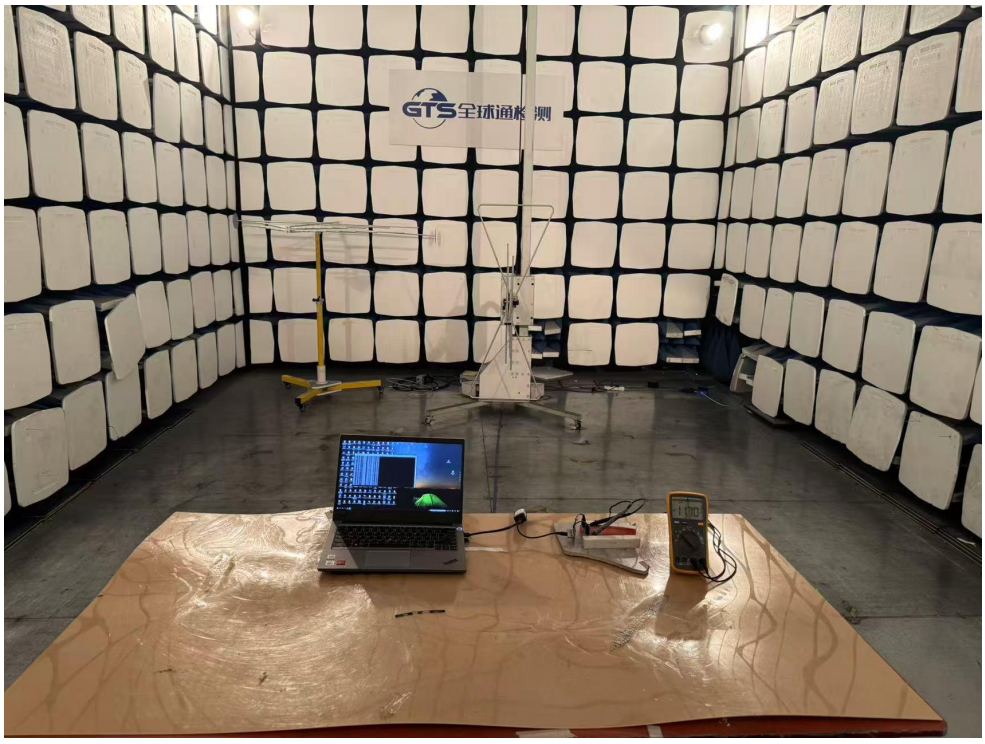
Note: 1. Result (dBuV/m) = Reading (dBuV/m) + Factor (dB/m) .

2. Factor (dB) = Antenna Factor (dB/m) + Cable loss (dB) – Pre Amplifier gain (dB).

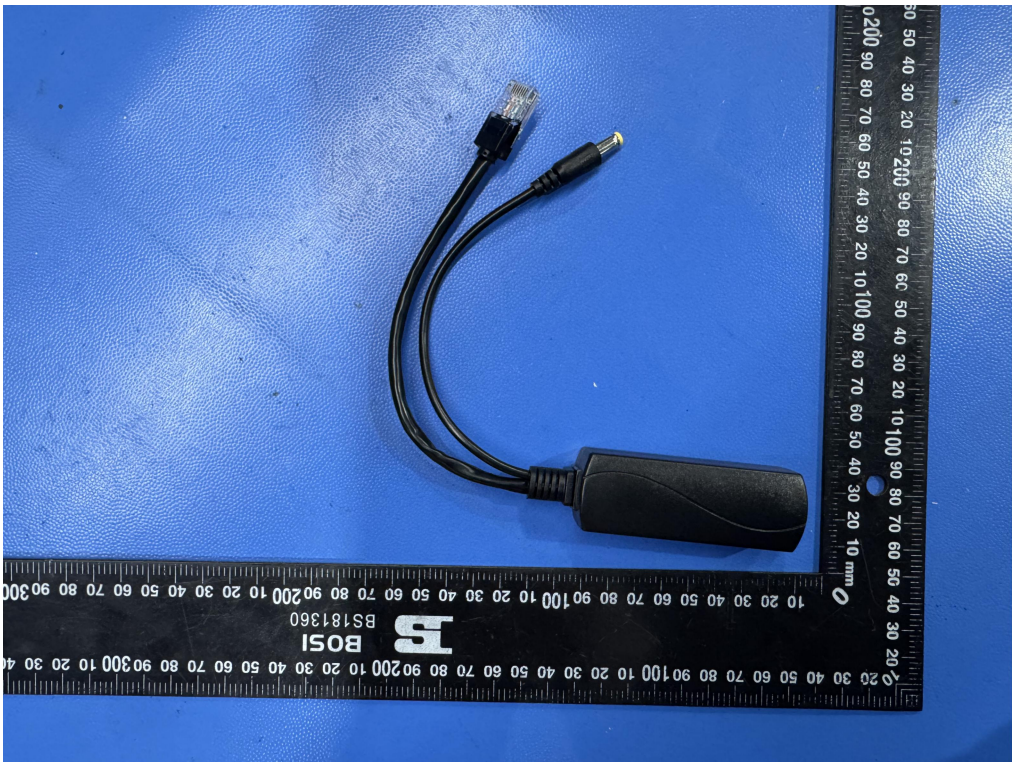
5. TEST SETUP PHOTOS OF THE EUT

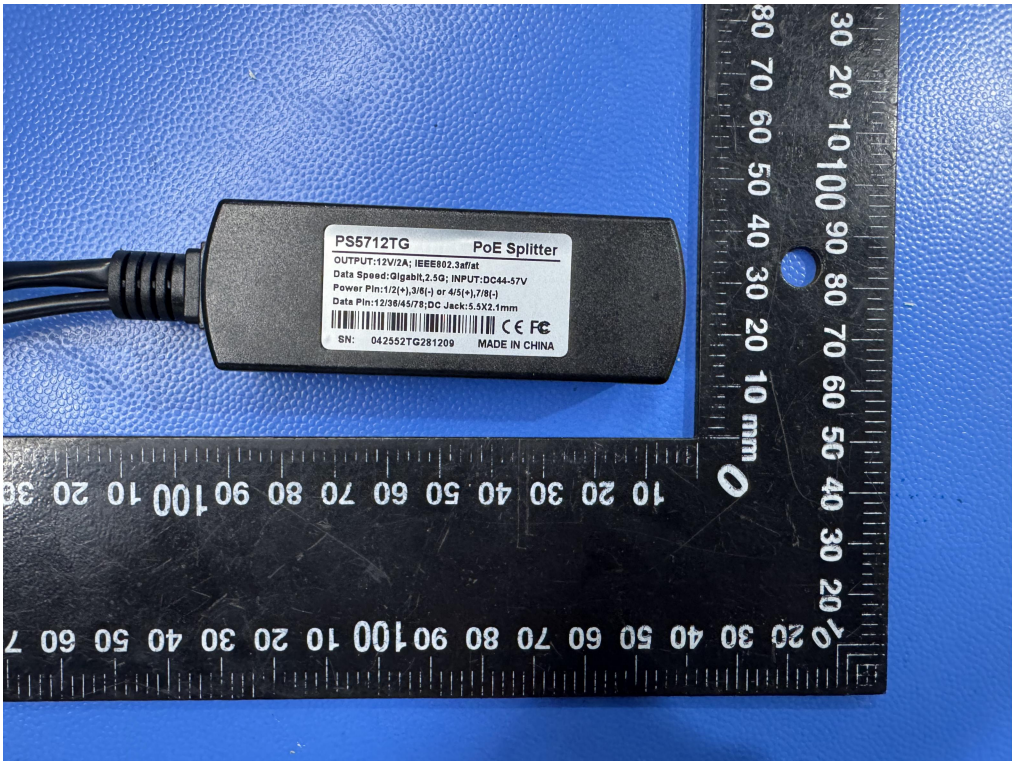
Conducted Emission

Radiated Emission below 1GHz



6. PHOTOS OF THE EUT





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