



FCC SDOC/ ISED TEST REPORT

Applicant : TPV Electronics (Fujian) Co., Ltd.
Address : Rongqiao Economic and Technological
Development Zone, Fuqing City, Fujian
Province, P.R. China
Equipment : LCD MONITOR
Test Model : Q27B30
Series Model : Q27B30S3,**Q27B30*****,**Q27B35*****
** (The “*” could be any alphanumeric character
including blank for marketing differentiation.)
Brand Name : AOC
Date of sample receipt : Apr. 30, 2025
Date(s) of test : May 16, 2025~ May 17, 2025
Standard : 47 CFR Part 15 Subpart B,IEEE/ANSI
C63.4-2014,IEEE/ANSI C63.4a-2017

I HEREBY CERTIFY THAT:

The test result refers exclusively to the test presented test model / sample. Without written approval of CerpPASS Technology Corp., the test report shall not be reproduced except in full.

Approved by:

Leevin Li / Supervisor



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**History of this test report**

Version No.	Report No	Date	Description
Rev.01	25030301-DEFV01	Apr. 14, 2025	Initial Issue
Rev.02	25040722-DEFV01	May 21, 2025	Second edition: 1. Add the panel and the corresponding panel OC 2. Add the motherboard, different from the original motherboard: HDMI / DP port refresh rate support 75Hz, the original 120Hz. 3. Add 1.2 m of power cable and photos.



1. Summary of Test Procedure and Test Result

1.1. Applicable Standards

The energy emitted by this equipment was passed both Radiated and Conducted Emissions **Class B** limits.

Standard	Test Procedure(s)	Test Item	Test Result
FCC 47 CFR Part 15: Subpart B	ANSI C63.4-2014	Conducted Emission	PASS
		Radiated Emission	PASS

Standard	Test Procedure(s)	Test Item	Test Result
ICES-003: issue 7	ANSI C63.4-2014; ANSI C63.4a-2017	Conducted Emission	PASS
		Radiated Emission	PASS

Note: Deviations Yes ☐ No ☒

*The lab has reduced the uncertainty risk factor from test equipment, environment and staff technicians which according to the standard on contract. Therefore, the test result will only be determined by standard requirement.



2. Test Configuration of Equipment under Test

2.1. Feature of Equipment under Test

Original

Product Name:	LCD MONITOR
Test Model:	Q27B30
Series Model:	Q27B30S3,**Q27B30*****,**Q27B35***** (The “*” could be any alphanumeric character including blank for marketing differentiation.)
Model Discrepancy:	All models are identical except for the name.
EUT Highest Frequency:	483MHz
Power Rating:	100-240V~, 50/60Hz, 1.5A
AC Power Cord Type:	Non-shielded, 1.8m & 1.5m
HDMI Cable:	Shielded, 1.8m & 1.5m
DP Cable:	Shielded, 1.8m & 1.5m
Adapter Spec.	Model: ADPC1938EX Input: 100-240V~ 1.3A 50-60Hz Output: DC 19V/2.0A 38W

Second edition:

Product Name:	LCD MONITOR
Test Model:	Q27B30
Series Model:	Q27B30S3,**Q27B30*****,**Q27B35***** (The “*” could be any alphanumeric character including blank for marketing differentiation.)
Model Discrepancy:	All models are identical except for the name.
EUT Highest Frequency:	302MHz
Power Rating:	100-240V~, 50/60Hz, 1.5A
AC Power Cord Type:	Non-shielded, 1.8m & 1.5m & 1.2m
HDMI Cable:	Shielded, 1.8m & 1.5m
DP Cable:	Shielded, 1.8m & 1.5m
Adapter Spec.	Model: ADPC1938EX Input: 100-240V~ 1.3A 50-60Hz Output: DC 19V/2.0A 38W

Note: For detail information please refer to the user manual.

Serial: Q27B30	--
Test Model: Q27B30	--
Version No.: Q27B30S3	Specific sales territory

**I/O PORT**

I/O PORT TYPE	Quantity
1) DC Power Port	1
2) DP Port	1
3) HDMI IN Port	1

2.2. Test Manner

Original

- During testing, the interface cables and equipment positions were varied according to ANSI C63.4
- The complete test system includes support units and EUT for EMI test.
- The test modes of Conducted Emission and Radiated Emission test as follow:

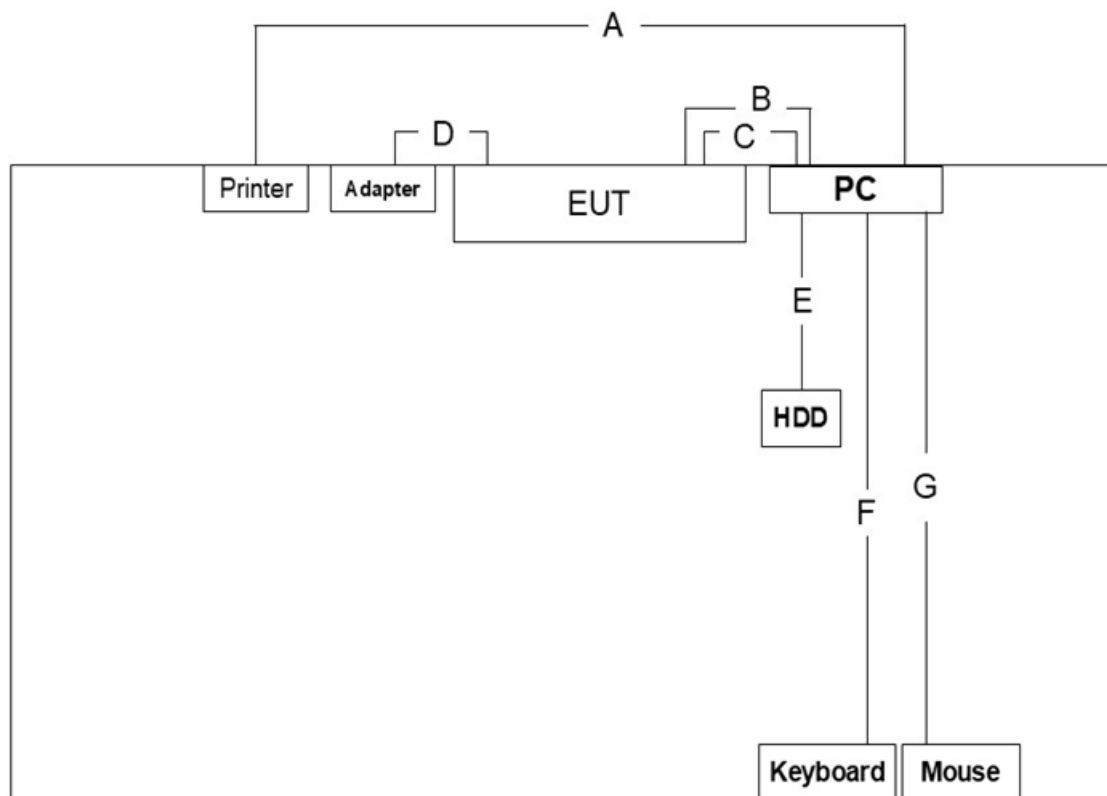
Conducted Emission for AC main power / Radiated Emissions	
Test Mode 1	Full system (HDMI mode 2560*1440@120Hz) Signal from PC with 1.5m HDMI Cable for 120V
Test Mode 2	Full system (HDMI mode 2560*1440@120Hz) Signal from PC with 1.8m HDMI Cable for 120V
Test Mode 3	Full system (HDMI mode 1920*1080@60Hz) Signal from DVD with 1.5m HDMI Cable for 120V
Test Mode 4	Full system (DP mode 2560*1440@120Hz) Signal from PC with 1.5m DP Cable for 120V
Test Mode 5	Full system (DP mode 2560*1440@120Hz) Signal from PC with 1.8m DP Cable for 120V
Test Mode 6	Full system (HDMI mode 1920*1080@120Hz) Signal from PC with 1.5m HDMI Cable for 120V
Test Mode 7	Full system (HDMI mode 640*480@120Hz) Signal from PC with 1.5m HDMI Cable for 120V
Test Mode 8	Full system (HDMI mode 2560*1440@120Hz) Signal from PC with 1.5m HDMI Cable for 240V
caused "Test Mode 8" generated the worst case, it was reported as the final data.	

**Second edition:**

- During testing, the interface cables and equipment positions were varied according to ANSI C63.4
- The complete test system includes support units and EUT for EMI test.
- The test modes of Conducted Emission and Radiated Emission test as follow:

Conducted Emission for AC main power / Radiated Emissions	
Test Mode 1	Full system (HDMI mode 2560*1440@75Hz) Signal from PC with 1.5m HDMI Cable for 240V
Test Mode 2	Full system (DP mode 2560*1440@75Hz) Signal from PC with 1.5m DP Cable 240V
Test Mode 3	Full system (HDMI mode 1920*1080@75Hz) Signal from PC with 1.5m HDMI Cable for 240V
Test Mode 4	Full system (HDMI mode 640*480@75Hz) Signal from PC with 1.5m HDMI Cable for 240V

caused "Test Mode 1" generated the worst case, it was reported as the final data.

2.3. Description of Support Unit

No.	Device	Manufacturer	Model No.	Description
1	PC	DELL	XPS 8920	1.8m Non Shielding
2	Keyboard	DELL	SK-8115	N/A
3	Mouse	DELL	G0K02XYK	N/A
4	Printer	ZEBRA	ZD422	1.8m Non Shielding
5	HDD	Transcend	TS2TSJ25M3C	N/A
6	Adapter	AOC	ADPC1938EX	N/A



No.	Cable	Quantity	Description
A	USB Printer Cable	1	Shielded, 1.8m
B	HDMI Cable	1	Shielded, 1.5m&1.8m
C	DP Cable	1	Shielded, 1.5m&1.8m
D	DC Cable	1	NonShielded, 1.0m
E	USB HDD Cable	1	Shielded 0.5m
F	USB Keyboard Cable	1	Shielded, 1.8m
G	USB Mouse Cable	1	Shielded, 1.8m

2.4. General Information of Test

Test Site	Cerpass Technology Corporation(Cerpass Laboratory) Address: Room 102, No. 5, Xing'an Road, Chang'an Town, Dongguan City, Guangdong Province Tel: +86-769-8547-1212 Fax: +86-769-8547-1912
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2.5. Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Conducted Emission	
The measurement uncertainty is evaluated as $\pm 2.52\text{dB}$.	
Radiated Emission	
(30MHz -1000MHz)	The measurement uncertainty is evaluated as $\pm 4.35\text{dB}$.
(1000MHz-6000MHz)	The measurement uncertainty is evaluated as $\pm 5.56\text{dB}$.
(6000MHz -18000MHz)	The measurement uncertainty is evaluated as $\pm 5.64\text{dB}$.

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



3. Test of Conducted Emission

3.1. Test Limit

Conducted Emissions were measured from 150 kHz to 30 MHz with a bandwidth of 9 KHz, according to the methods defined in ANSI C63.4-2014. The EUT was placed on a nonmetallic stand in a shielded room 0.8 meters above the ground plane. The interface cables and equipment positioning were varied within limits of reasonable applications to determine the position produced maximum conducted emissions.

Table 1 Conducted Emission Limits (dB μ V):

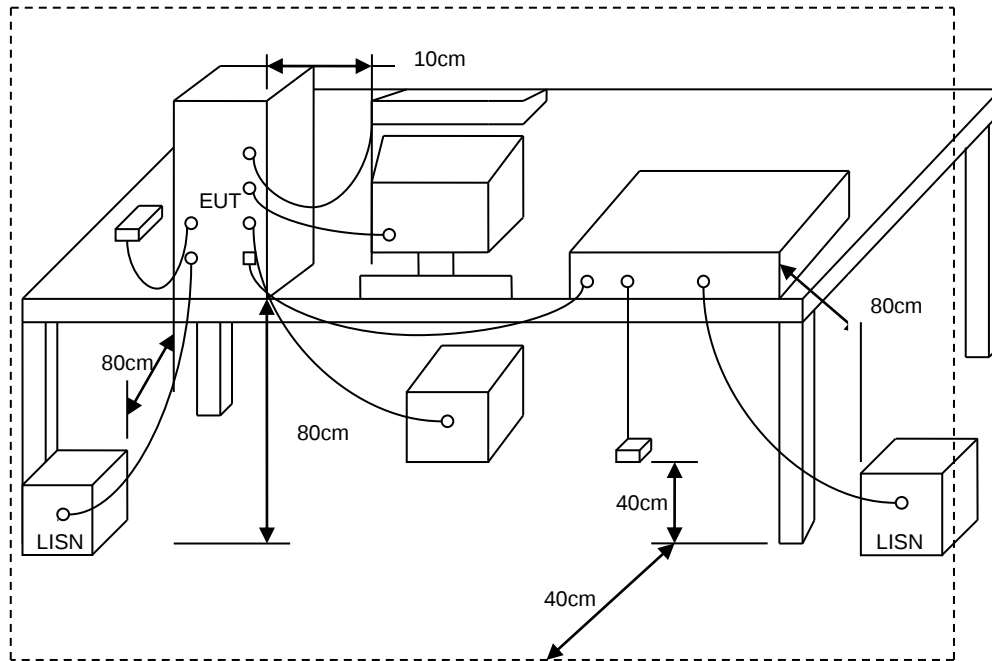
Frequency range (MHz)	Class A Equipment		Class B Equipment	
	Quasi Peak	Average	Quasi Peak	Average
0.15 to 0.50	79	66	66 to 56*	56 to 46*
0.50 to 5	73	60	56	46
5. to 30.	73	60	60	50
*The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5MHz.				

3.2. Test Procedures

- The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
- Connect EUT to the power mains through a line impedance stabilization network (LISN).
- All the support units are connecting to the other LISN.
- The LISN provides 50 ohm coupling impedance for the measuring instrument.
- The FCC states that a 50 ohm, 50 micro-Henry LISN should be used.
- Both sides of AC line were checked for maximum conducted interference.
- The frequency range from 150 kHz to 30 MHz was searched.
- Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.



3.3. Typical test Setup





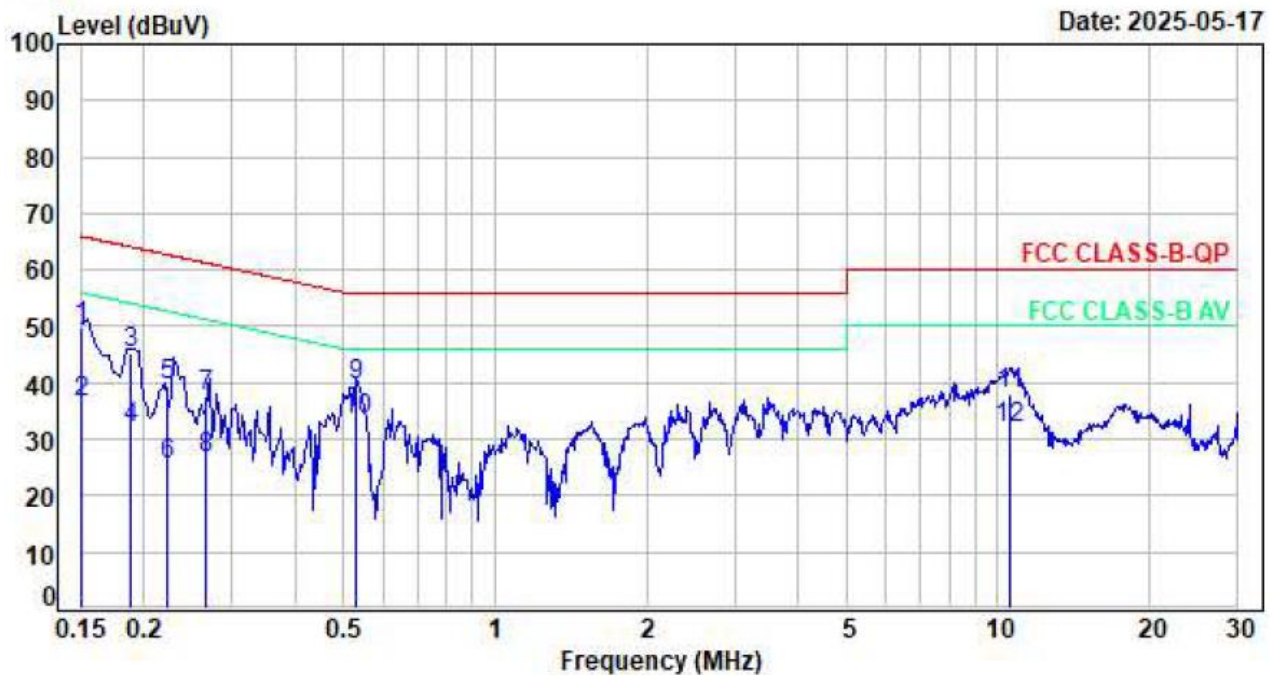
3.4. Test Result and Data

Test Mode:	Test Mode 1	Test Engineer	Nunu
Power :	AC 240V	Phase :	LINE
Temperature :	22°C	Humidity :	56%
EUT:	Q27B30		

Note: Level = Reading + Factor

Margin = Level – Limit

Factor = (LISN or ISN or PLC or Current Probe) Factor + Cable Loss + Attenuator



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.15	10.38	39.27	49.65	65.95	-16.30	QP	P
2	0.15	10.38	26.04	36.42	55.95	-19.53	Average	P
3	0.19	10.36	34.72	45.08	64.10	-19.02	QP	P
4	0.19	10.36	21.61	31.97	54.10	-22.13	Average	P
5	0.22	10.35	29.12	39.47	62.68	-23.21	QP	P
6	0.22	10.35	14.98	25.33	52.68	-27.35	Average	P
7	0.27	10.35	27.39	37.74	61.21	-23.47	QP	P
8	0.27	10.35	16.11	26.46	51.21	-24.75	Average	P
9	0.53	10.35	29.12	39.47	56.00	-16.53	QP	P
10	0.53	10.35	23.09	33.44	46.00	-12.56	Average	P
11	10.52	10.62	27.42	38.04	60.00	-21.96	QP	P
12	10.52	10.62	21.41	32.03	50.00	-17.97	Average	P

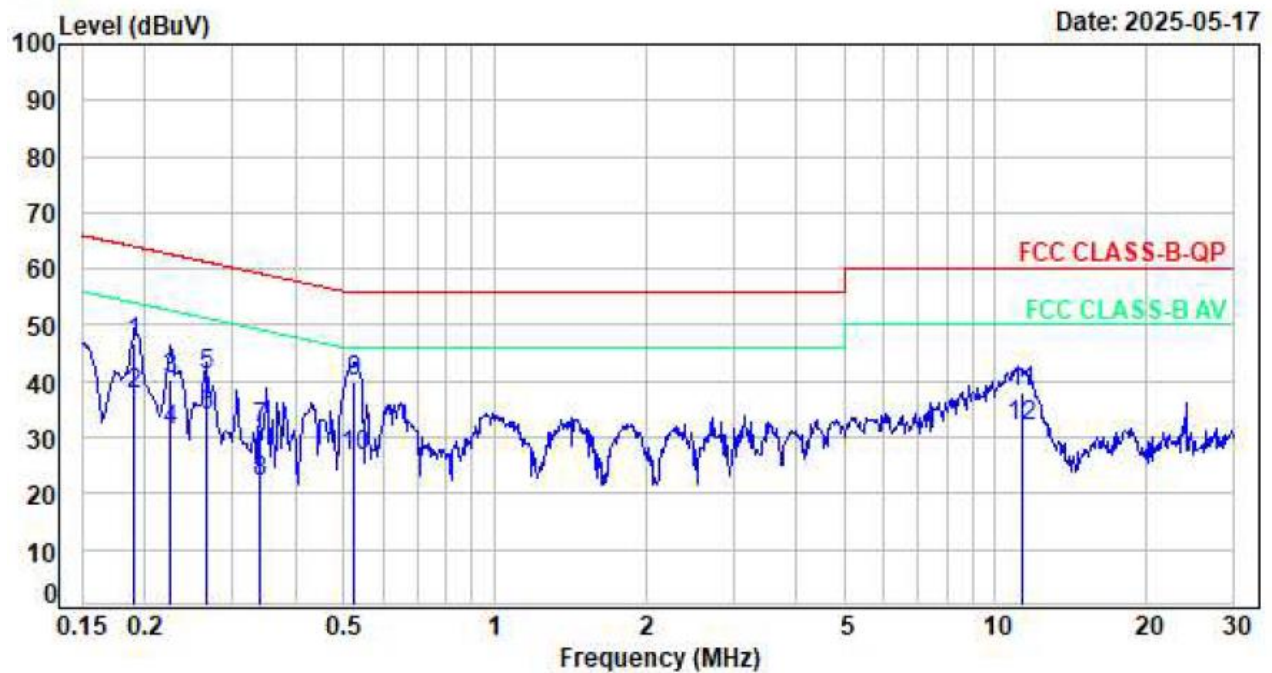


Test Mode:	Test Mode 1	Test Engineer	Nunu
Power :	AC 240V	Phase :	NEUTRAL
Temperature :	22°C	Humidity :	56%
EUT:	Q27B30		

Note: Level = Reading + Factor

Margin = Level – Limit

Factor = (LISN or ISN or PLC or Current Probe) Factor + Cable Loss + Attenuator



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.19	10.29	36.61	46.90	64.03	-17.13	QP	P
2	0.19	10.29	27.52	37.81	54.03	-16.22	Average	P
3	0.22	10.29	30.14	40.43	62.65	-22.22	QP	P
4	0.22	10.29	20.87	31.16	52.65	-21.49	Average	P
5	0.27	10.29	30.63	40.92	61.21	-20.29	QP	P
6	0.27	10.29	23.48	33.77	51.21	-17.44	Average	P
7	0.34	10.28	21.11	31.39	59.21	-27.82	QP	P
8	0.34	10.28	11.72	22.00	49.21	-27.21	Average	P
9	0.52	10.30	29.72	40.02	56.00	-15.98	QP	P
10	0.52	10.30	16.33	26.63	46.00	-19.37	Average	P
11	11.28	10.62	27.52	38.14	60.00	-21.86	QP	P
12	11.28	10.62	21.24	31.86	50.00	-18.14	Average	P



4. Test of Radiated Emission

4.1. Test Limit (FCC)

Radiated emissions from 30 MHz to 40,000 MHz were measured with a bandwidth of 120 kHz or bandwidth of 1MHz (above 1GHz) according to the methods defines in ANSI C63.4.

The EUT was placed on a nonmetallic stand in the open-field site, 0.8 meter above the ground plane. The interface cables and equipment positions were varied within limits of reasonable applications to determine the positions producing maximum radiated emissions.

Table 1 – Frequency below 1GHz

Frequency range (MHz)	Class A Equipment (dBμV/m, quasi-peak)		Class B Equipment (dBμV/m, quasi-peak)	
	3m	10m	3m	10m
30 - 88	49.4	39.0	40.0	29.6
88 - 216	53.9	43.5	43.5	33.1
216 - 960	56.8	46.4	46.0	35.6
960 - 1000	59.9	49.5	54.0	43.6

Note: The more stringent limit applies at transition frequencies.

(1) Distance from 10 meter change into 3 meter, the limit value needs to increase
 $= 20\text{Log}(10/3) = 20\text{Log}(3.33) = 10.4$

(2) Distance from 3 meter change into 10 meter, the limit value needs to decrease
 $= 20\text{Log}(3/10) = 20\text{Log}(0.3) = -10.4$

Table 2 –Frequency above 1GHz

Frequency (GHz)	Distance Meters	Class A(dBμV/m)		Class B(dBμV/m)	
		Peak	Average	Peak	Average
1 - 18	3	80.0	60.0	74.0	54.0
18 - 40	1	89.5	69.5	83.5	63.5

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

(2) Emission level (dBμV/m) = 20 Log Emission level(μV/m)

(3) Distance from 3 meter change into 1 meter, the limit value needs to increase
 $= 20\text{Log}(3/1) = 20\text{Log}(3) = 9.5$

Table 3 –Frequency range of radiated measurement (for unintentional radiators)

Highest frequency generated or Upper frequency of measurement used in the device or on which the device operates or tunes(MHz)	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 40GHz, which is lower



4.2. Test Limit (ISED)

Radiated emissions from 30 MHz to 40,000 MHz were measured with a bandwidth of 120 kHz or bandwidth of 1MHz (above 1GHz) according to the methods defines in ANSI C63.4.

The EUT was placed on a nonmetallic stand in the open-field site, 0.8 meter above the ground plane. The interface cables and equipment positions were varied within limits of reasonable applications to determine the positions producing maximum radiated emissions.

Table 1 – Frequency below 1GHz

Frequency range (MHz)	Class A (dBμV/m, Quasi-Peak)		Class B (dBμV/m, Quasi-Peak)	
	3m	10m	3m	10m
30 - 88	50.0	40.0	40.0	30.0
88 - 216	54.0	43.5	43.5	33.1
216 - 230	56.9	46.4	46.0	35.6
230 - 960	57.0	47.0	47.0	37.0
960 - 1000	60.0	49.5	54.0	43.5

Note: The more stringent limit applies at transition frequencies.

Table 2 –Frequency above 1GHz

Frequency range (GHz)	Distance Meter	Class A b, c, d		Class B b, c, d	
		Peak (dBμV/m)	Average (dBμV/m)	Peak (dBμV/m)	Average (dBμV/m)
1 - 18	3	80.0	60.0	74.0	54.0
18 - 40	1	89.5	69.5	83.5	63.5

a. The highest measurement frequency, FM, in GHz, shall be determined as per Table 3.
b. The measurement bandwidth shall be 1 MHz or greater.
c. These limit levels apply for a measurement distance of 3 m. If using a different measurement distance, the measured levels shall be extrapolated to the 3 m limit distance using a factor of 20 dB per decade of distance. The measurement distance shall place the measurement antenna in the far field of the ITE or digital apparatus under test.
d. The test site shall be a free-space OATS (FSOATS), as defined in CAN/CSA-CISPR 32:17, and it shall be validated at the distance used for radiated emission measurements on the ITE or digital apparatus under test.
e. Distance from 3 meter change into 1 meter, the limit value needs to increase
= $20\log(3/1) = 9.5$

Table 3: Required highest measurement frequency for radiated emissions

Highest internal frequency (FX) i	Highest measurement frequency (FM)
$FX \leq 108 \text{ MHz}$	1 GHz
$108 \text{ MHz} < FX \leq 500 \text{ MHz}$	2 GHz
$500 \text{ MHz} < FX \leq 1 \text{ GHz}$	5 GHz
$FX > 1 \text{ GHz}$	5 x FX up to a maximum of 40 GHz

i. FX is the highest fundamental frequency generated and/or used in the ITE or digital apparatus under test.

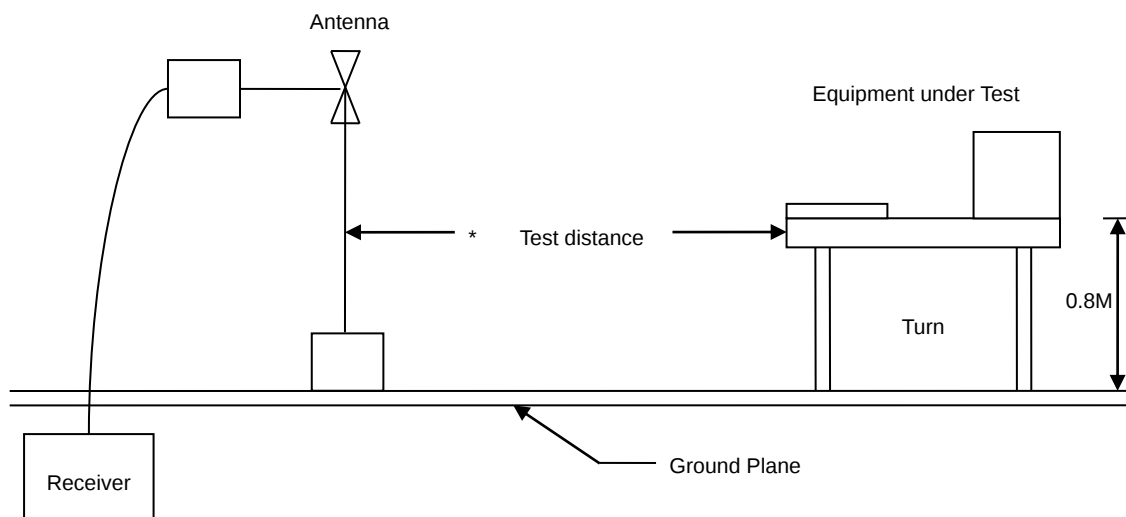


4.3. Test Procedures

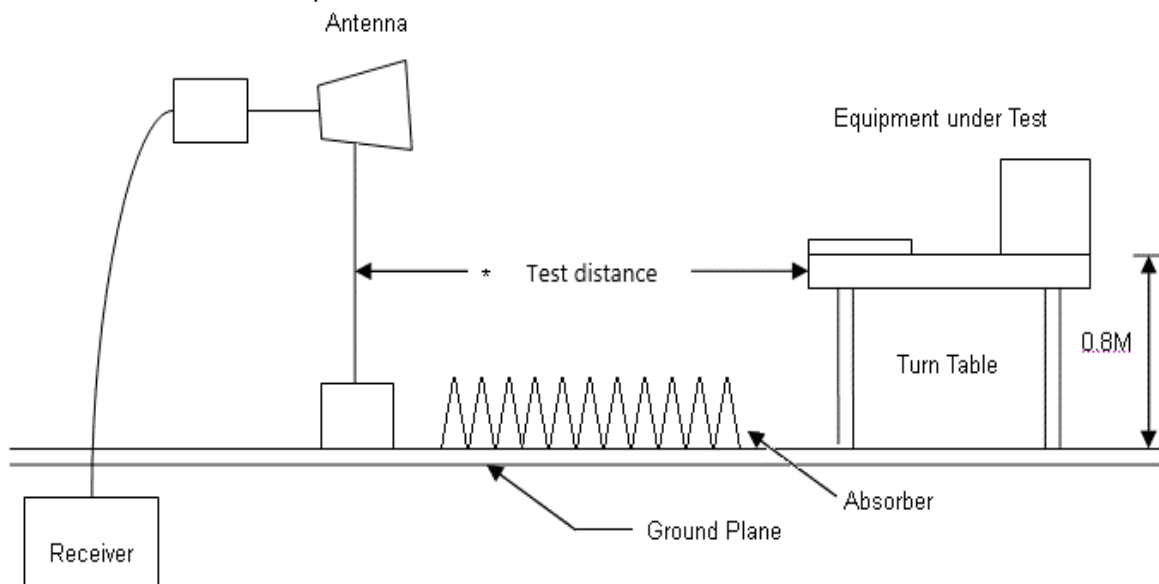
- The EUT was placed on a Rota table top 0.8 meter above ground.
- The EUT was set 3 or 10 meters from the interference receiving antenna which was mounted on a variable height antenna tower.
- The table was rotated 360 degrees to determine the position of the highest radiation.
- The antenna is a half wave dipole and its height is varied between one meter and four meters above ground to find the maximum value of the field strength both horizontal polarization and vertical polarization of the antenna are set to make the measurement.
- For each suspected emission the EUT was arranged to its worst case and then tune the antenna tower (from 1 M to 4 M) and turn table (from 0 degree to 360 degrees) to find the maximum reading.
- Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.
- If the emission level of the EUT in peak mode was 6 dB lower than the limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 6 dB margin will be repeated one by one using the quasi-peak method and reported.

4.4. Typical test Setup

Below 1GHz Test Setup



Above 1GHz Test Setup





4.5. Test Result and Data (Below 1GHz)

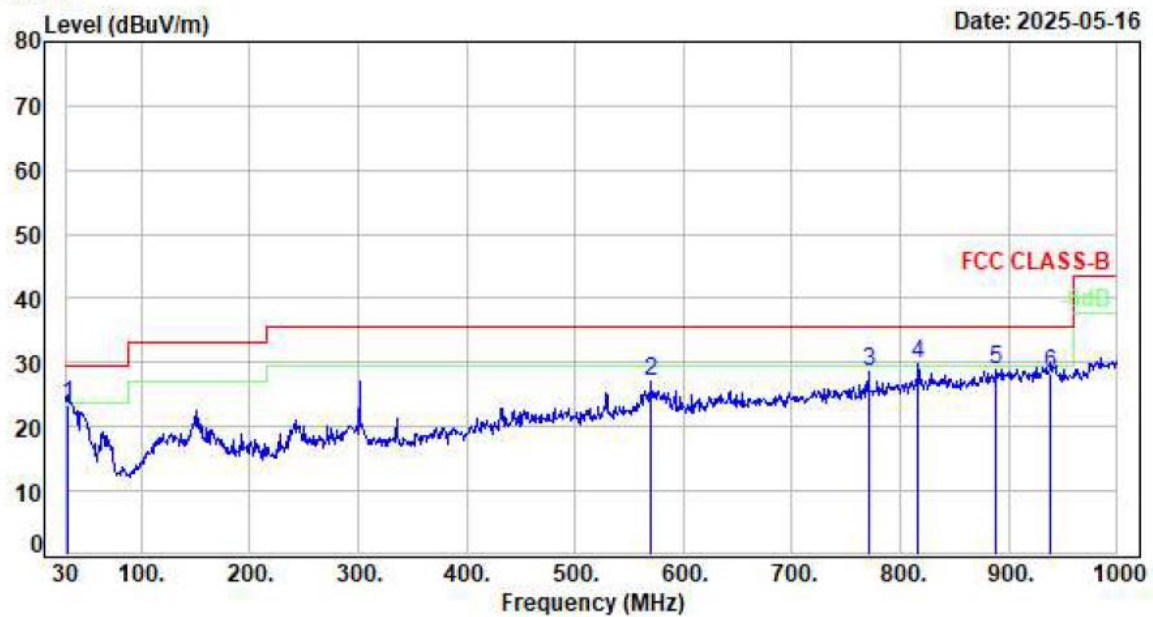
4.5.1 Radiated Emission for FCC Part 15 Subpart B Test Data

Test Mode:	Test Mode 1	Test Engineer	Nunu
Power :	AC 240V	Phase :	VERTICAL
Temperature :	24 °C	Humidity :	54%
EUT:	Q27B30		

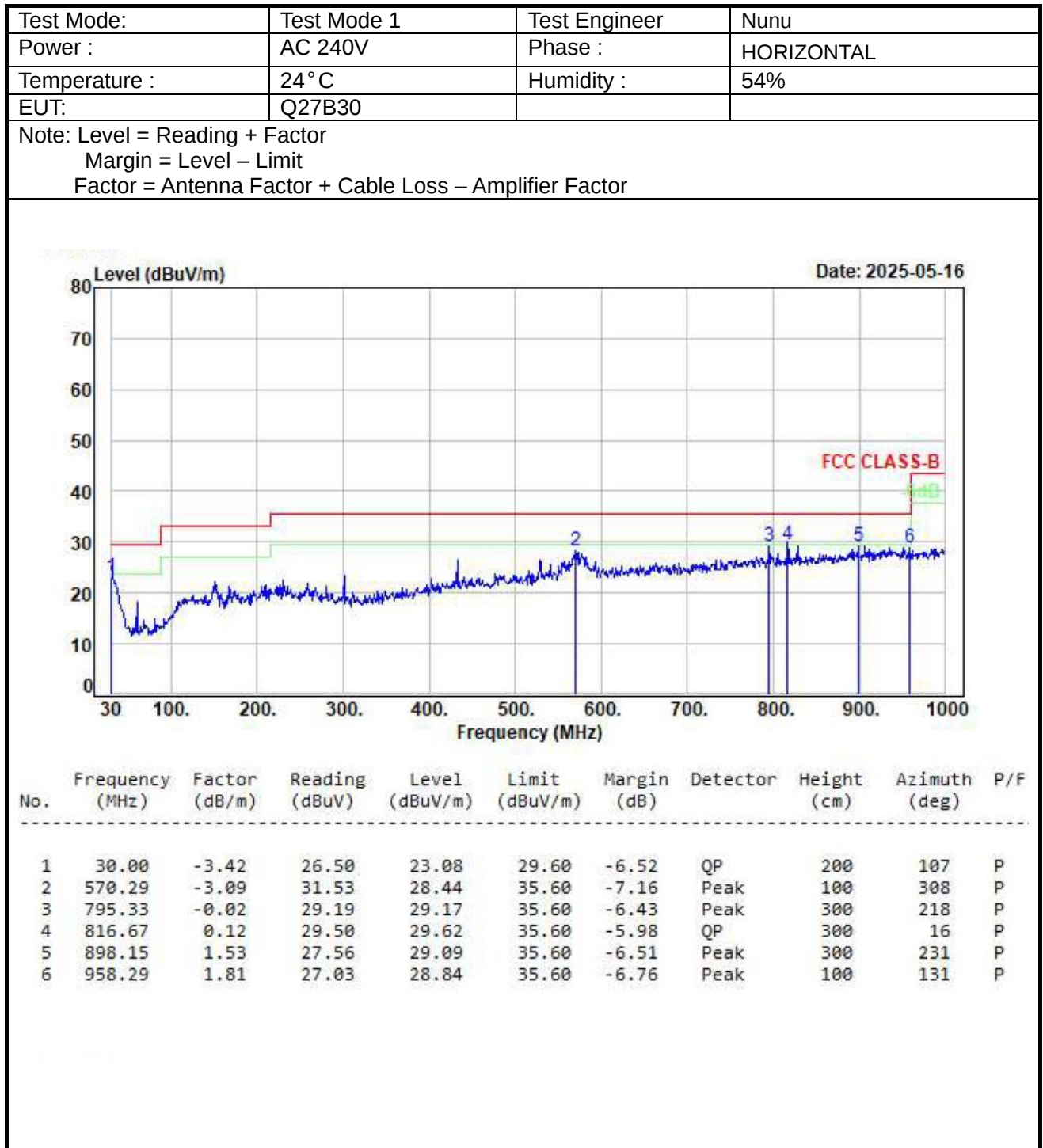
Note: Level = Reading + Factor

Margin = Level – Limit

Factor = Antenna Factor + Cable Loss – Amplifier Factor

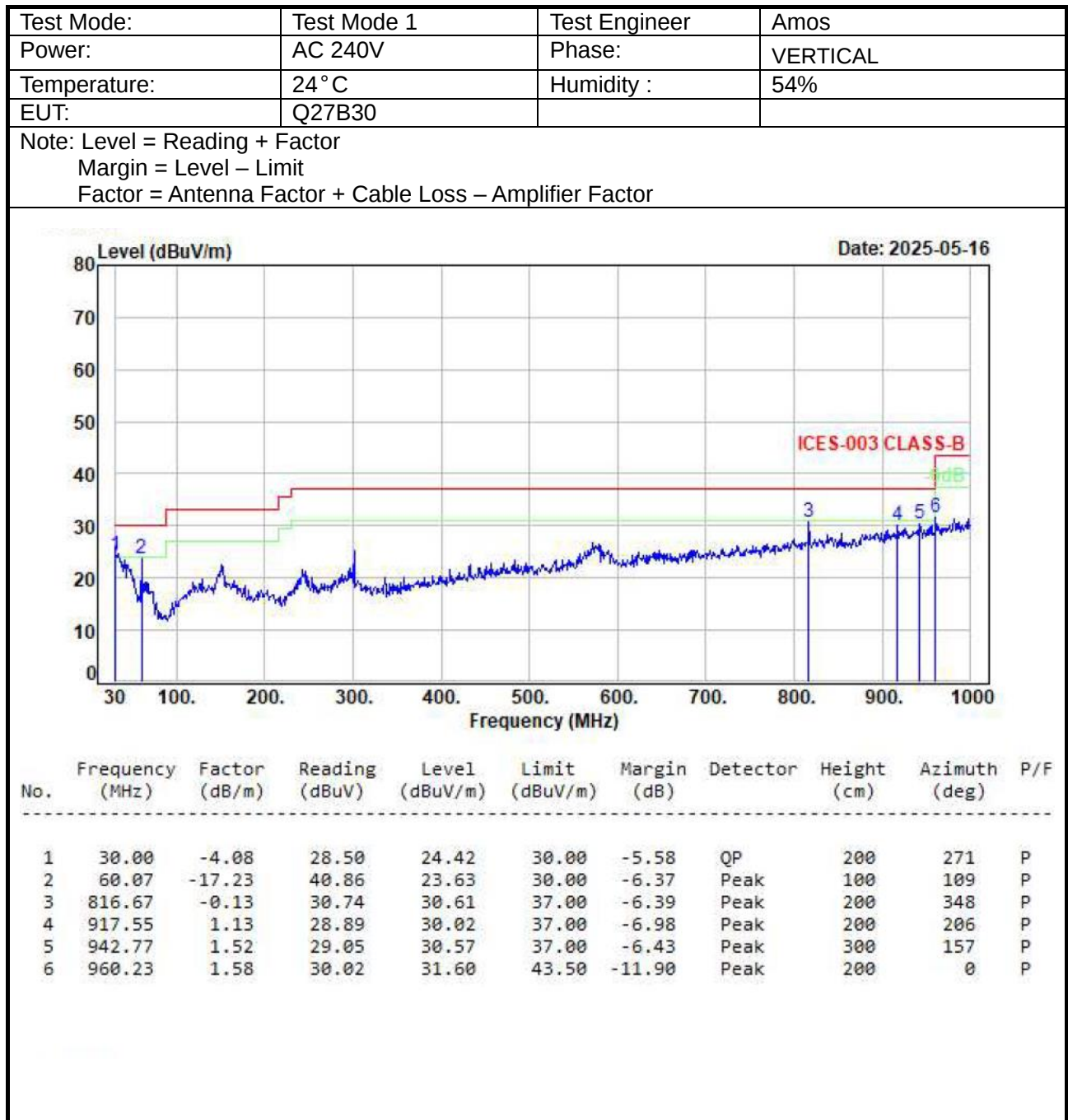


No.	Frequency (MHz)	Factor (dB/m)	Reading (dBUV)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	32.91	-6.10	29.60	23.50	29.60	-6.10	QP	200	286	P
2	570.29	-3.95	30.98	27.03	35.60	-8.57	Peak	300	15	P
3	771.08	-0.68	29.21	28.53	35.60	-7.07	Peak	100	208	P
4	816.67	-0.13	29.90	29.77	35.60	-5.83	Peak	200	354	P
5	888.45	0.98	28.05	29.03	35.60	-6.57	Peak	400	360	P
6	938.89	1.51	26.70	28.21	35.60	-7.39	QP	400	42	P





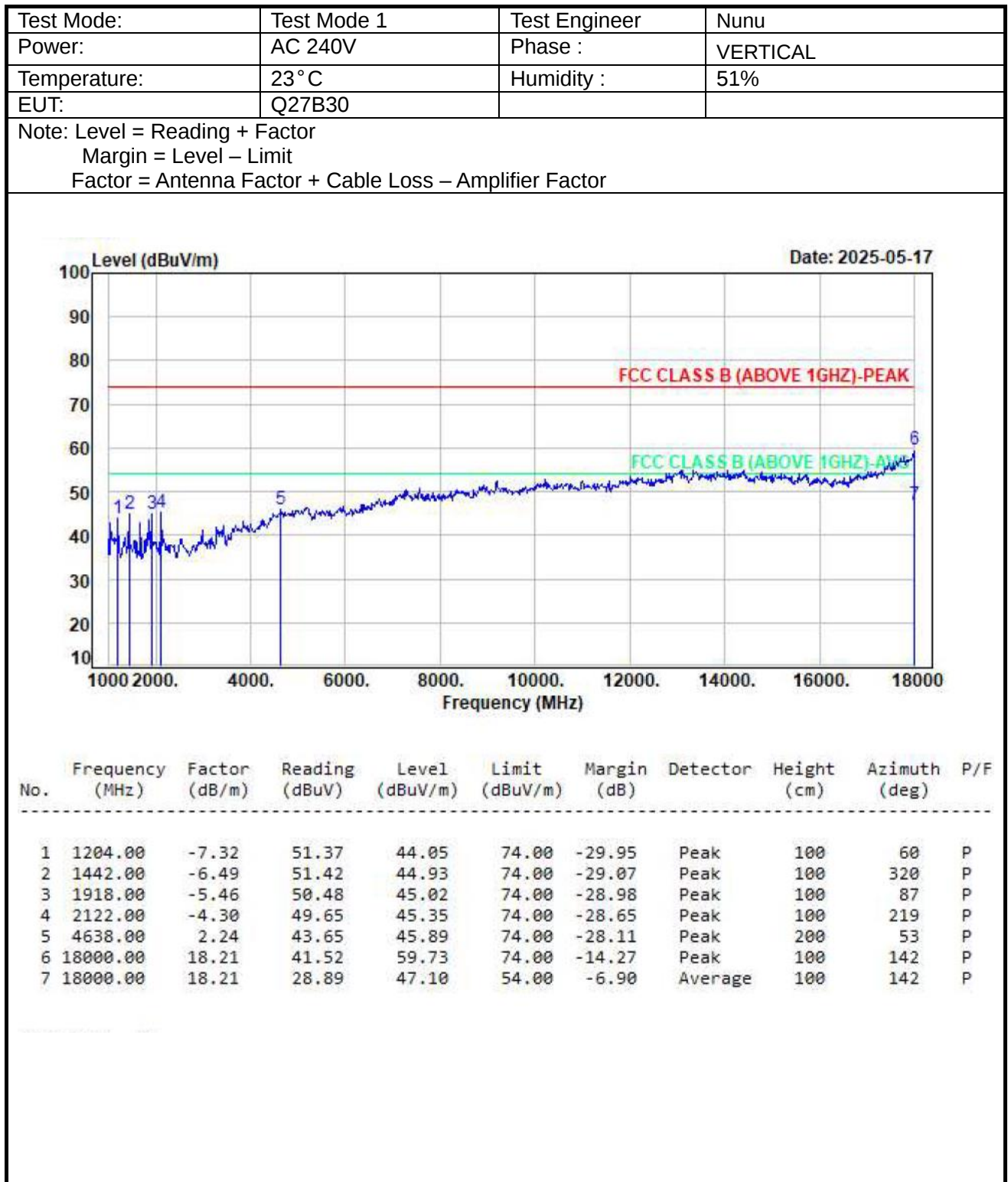
4.5.2 Radiated Emission for Canada ICES-003 issue 7 Test Data

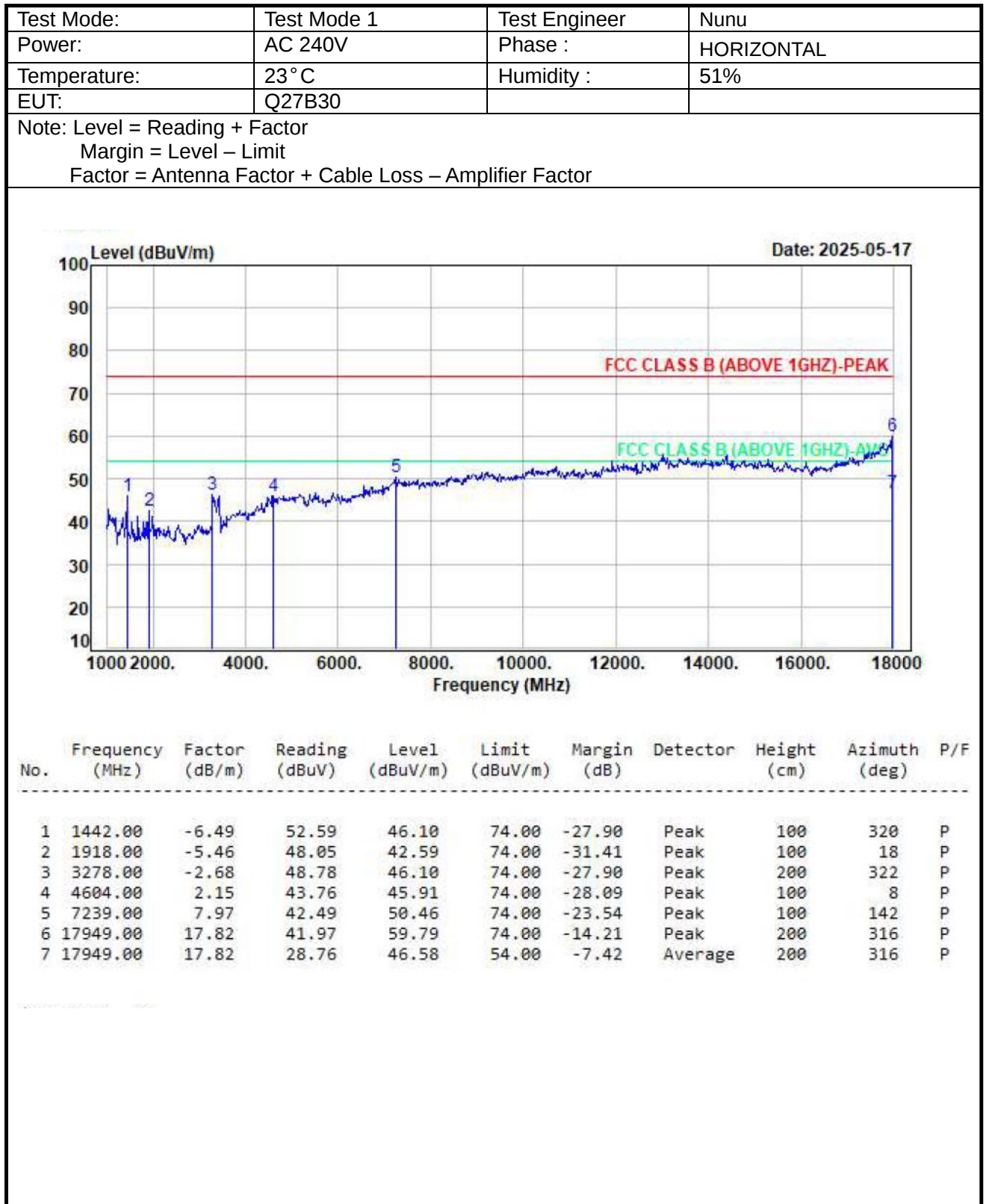






4.6. Test Result and Data (Above 1GHz)

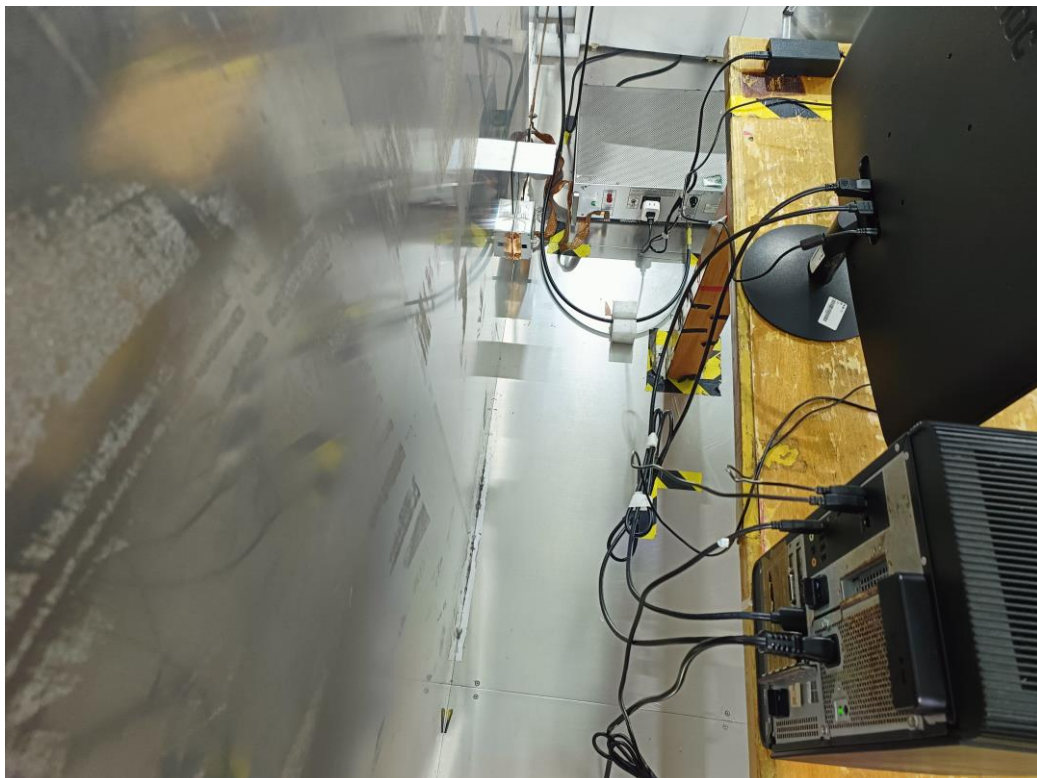






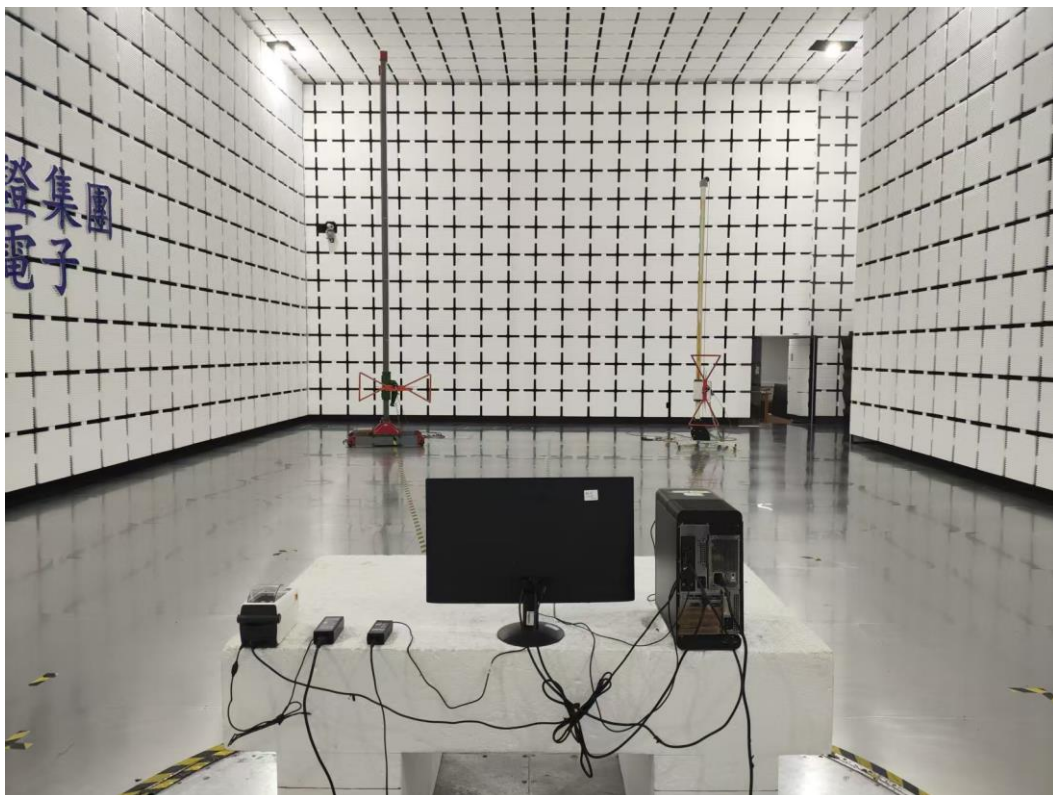
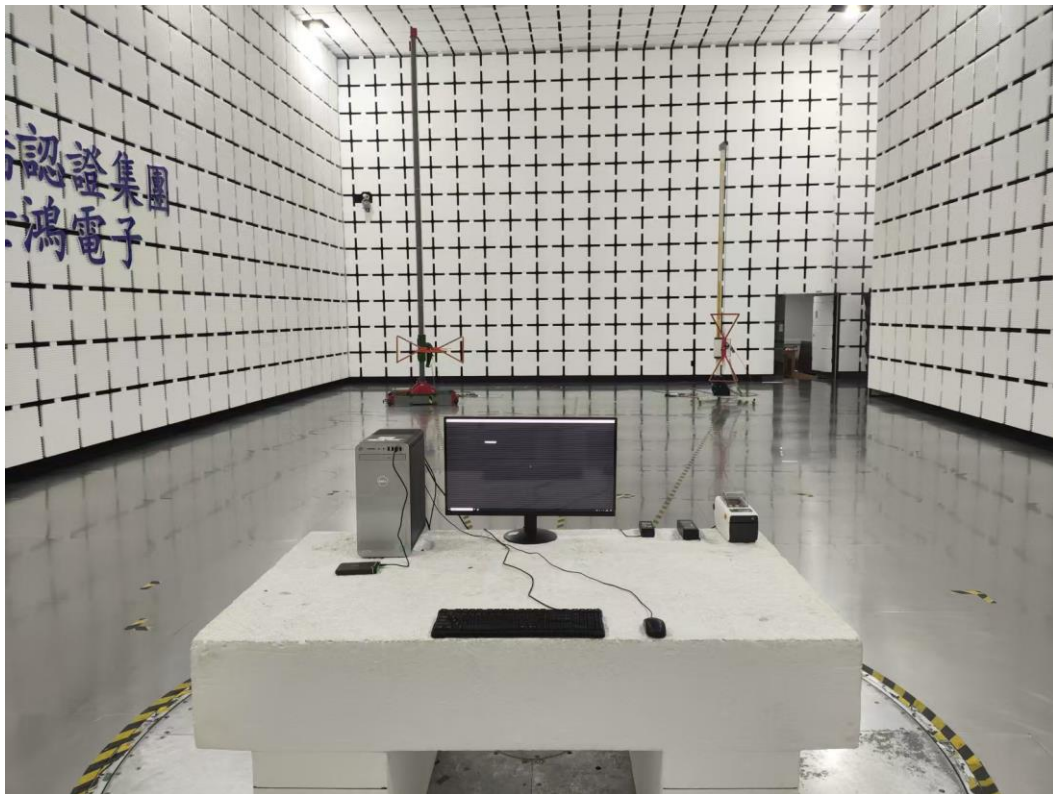
5. Photographs of the test configuration

Conducted Emission



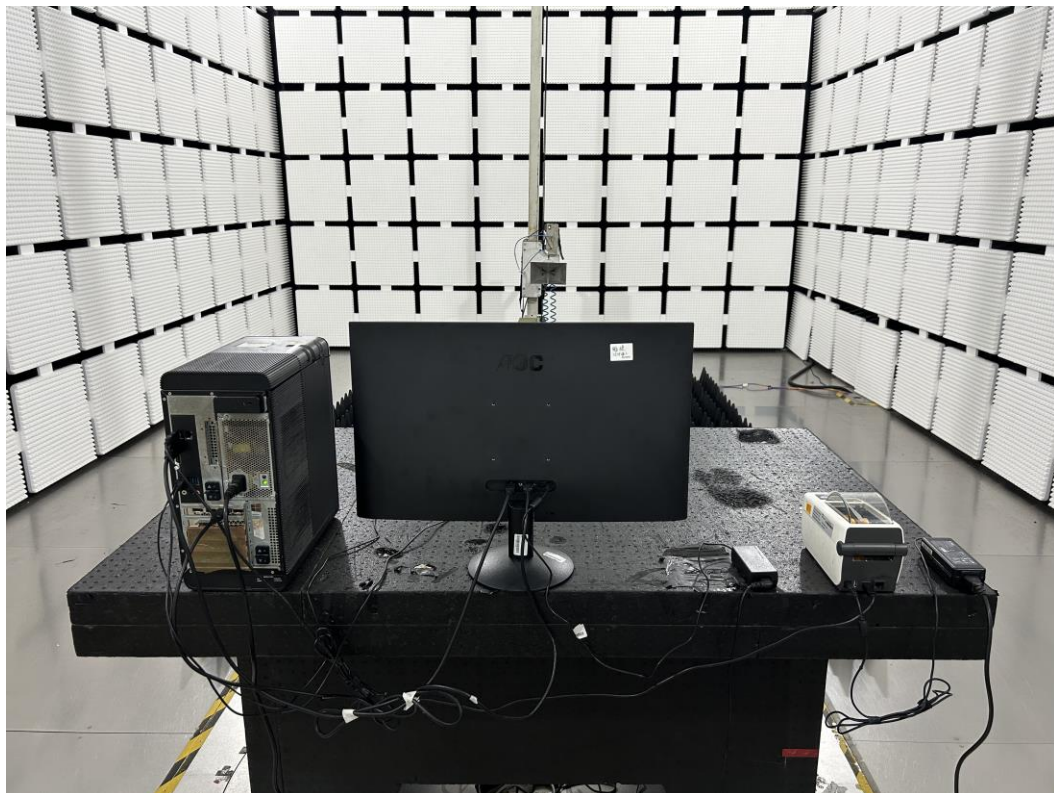
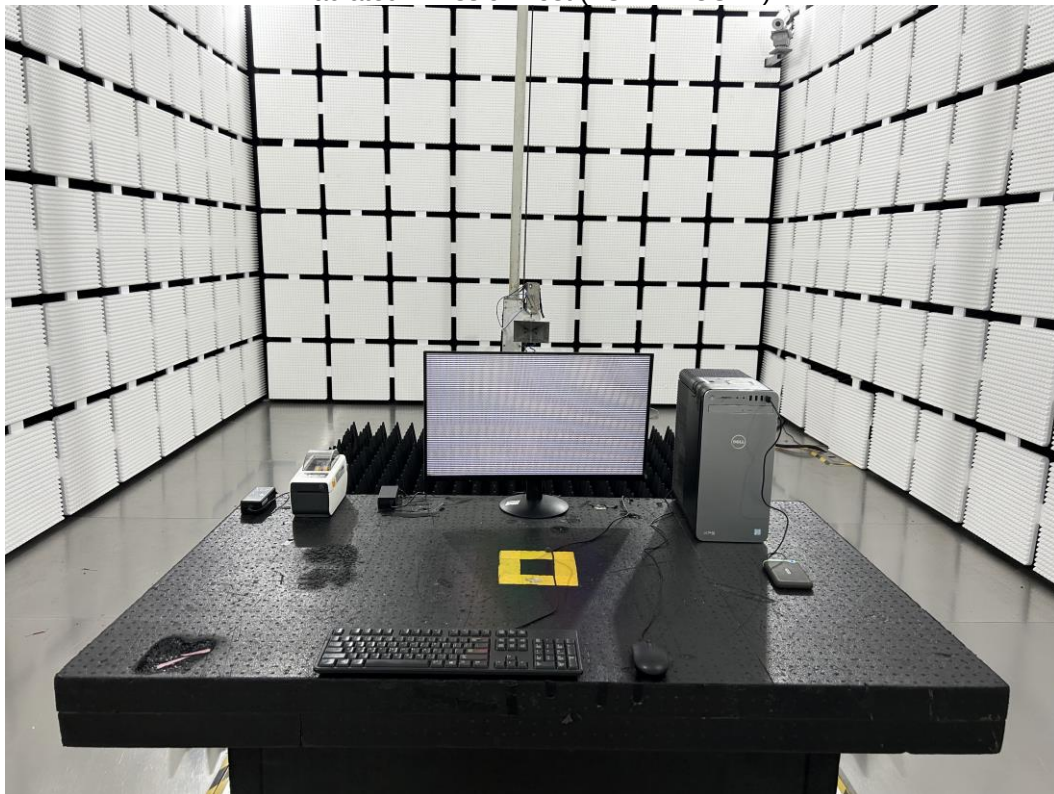


Radiated Emission Test (30MHz~1GHz)





Radiated Emission Test (1GHz ~18GHz)





6. List of Measuring Equipment

Conducted Emission					
Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration	Valid Date.
Test Receiver	R&S	ESCI	100564	2024/12/30	2025/12/29
LISN	SCHWARZBECK	NSLK 8127	8127748	2024/12/30	2025/12/29
LISN	R&S	ENV216	100024	2024/12/30	2025/12/29
Pulse Limiter with 10dB Attenuation	SCHWARZBECK	VTSD 9561-F	9561-F106	2024/12/30	2025/12/29
Cable	Aoda	RG214	Cable-06	2024/12/30	2025/12/29
Temperature/Humidity Meter	GEMLEAD	STH200A	N/A	2024/08/02	2025/08/01
Software	AUDIX	E3	Version: 8.14806b	N/A	N/A
Test Site	Yiheng	AC-DG-005	N/A	2023/5/6	2026/5/5

Radiated Emission below 1GHz					
Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date
Vertical					
EMI Test Receiver	R&S	ESCI	100565	2024/08/01	2025/07/31
Preamplifier	Mini-Circuits	ZKL-2+	S1773911904	2024/08/01	2025/07/31
Bilog Antenna	Sunol Science	JB1	A072414-2	2024/06/12	2026/06/11
Cable	CH-CoDesign	CCXA81-SMAM NM-9M	21070881	2024/08/01	2025/07/31
Cable	CH-CoDesign	CCXA81-SMAM NM-7M-L	21070884	2024/08/01	2025/07/31
Horizontal					
EMI Test Receiver	R&S	ESCI7	100968	2024/12/30	2025/12/29
Preamplifier	EMCI	EMCI 030-00-3230	SN016723	2024/12/30	2025/12/29
Bilog Antenna	Sunol Science	JB6	A111218	2025/01/16	2027/01/15
Cable	CH-CoDesign	CCXA81-SMAM NM-9M	21070878	2024/12/30	2025/12/29
Cable	CH-CoDesign	CCXA81-SMAM NM-10M-L	21070887	2024/12/30	2025/12/29
Temperature/Humidity Meter	GEMLEAD	STH200A	N/A	2024/08/02	2025/08/01
Software	AUDIX	E3	Version: 8.14806b	N/A	N/A
Test Site	Yiheng	AC-DG-007	N/A	2024/4/12	2027/4/11

Radiated Emission Above1GHz					
Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date
Preamplifier	Agilent	8449B	3008A02342	2024/08/01	2025/07/31
Horn Antenna	Sunol	DRH-118	A072913	2024/08/02	2026/08/01
FSQ Signal Analyzer	R&S	FSQ40	200012	2024/12/31	2025/12/30
Cable	Jiuzhoubona	T-SMA	SMA48AL-0500	2024/08/01	2025/07/31
Cable	EMCI	EM104-NMSM-7M	Cable-01	2024/08/01	2025/07/31
Temperature/Humidity Meter	GEMLEAD	STH200A	N/A	2024/08/02	2025/08/01



Software	AUDIX	E3	Version: 8.14806b	N/A	N/A
Test Site	Yiheng	AC-DG-004	N/A	2023/5/10	2026/5/9

----- End of the report -----