



Test Report No.:
FCC2025-0046-EMC

TEST REPORT

FCC ID : 2BTU6-JFR6

Applicant : ZHEJIANG JUNCONTROL INTELLIGENT
TECHNOLOGY CO., LTD.

Product Name : JMR robot

Mode No. : JFR6

CVC Testing Technology Co., Ltd.

Test Report No. FCC2025-0046-EMC		Page 2 of 22	
Applicant		Name : ZHEJIANG JUNCONTROL INTELLIGENT TECHNOLOGY CO., LTD. Address : Room 401,Building 13,No.36,Changsheng SouthRoad, Economic andTechnoone, Jiaxing City, Zhejiang Province	
Manufacturer		Name : ZHEJIANG JUNCONTROL INTELLIGENT TECHNOLOGY CO., LTD. Address : Room 401,Building 13,No.36,Changsheng SouthRoad, Economic andTechnoone, Jiaxing City, Zhejiang Province	
Factory		Name : ZHEJIANG JUNCONTROL INTELLIGENT TECHNOLOGY CO., LTD. Address : Room 401,Building 13,No.36,Changsheng SouthRoad, Economic andTechnoone, Jiaxing City, Zhejiang Province	
Equipment under Test		Product Name : JMR robot Model No. : JFR6 Trade mark : / Serial no. : / Sampling :1-1	
Date of Receipt.	2025.08.24	Date of Testing	2025.08.25-2025.09.09
Test Specification		Test Result	
FCC 47 CFR Part 15B		PASS	
Evaluation of Test Result	The equipment under test was found to comply with the requirements of the standards applied. Seal of CVC Issue Date: 2025-09-17 Correction1: 2025-12-23		
Tested by: Wang Xin <i>Wang Xin</i>		Reviewed by: Xu Zhenfei <i>Xu Zhenfei</i>	Tested by: Wang Xin <i>Wang Xin</i>
Other Aspects: The original Test Report No. FCC2025-0045-EMC was issued dated on Sep. 17,2025. Correction 1 to Report No. FCC2025-0045-EMC was made dated on Dec.23,2025 due to applicant needed to add FCC ID number on P1.			
Abbreviations:OK, Pass= passed Fail = failed N/A= not applicable EUT= equipment, sample(s) under tested			
This test report relates only to the EUT, and shall not be reproduced except in full, without written approval of CVC.			

TABLE OF CONTENTS

1.1

GENERAL INFORMATION

4

2.

TEST SITES.....

5

2.1

TEST FACILITIES.....

5

2.2

DESCRIPTION OF NON-STANDARD METHOD AND DEVIATIONS

5

2.3

LIST OF TEST AND MEASUREMENT INSTRUMENTS.....

5

3.

TEST CONFIGURATION

6

3.1

TEST MODE

6

4.

SUMMARY OF MEASUREMENT RESULTS.....

7

5.

MEASUREMENT PROCEDURE

8

5.1

CONDUCTED EMISSION.....

8

5.2

RADIATED EMISSION

12

6.

MEASUREMENT EQUIPMENT

22

General Product Information

1.1 General information

Product Name	JMR robot
Model No.	JFR6
Power Supply	100-240V~ 50-60Hz
Highest frequency of the internal sources	The maximum operating frequency is 2.6GHz

- Remark:
1. The information of the EUT is declared by the manufacturer.
 2. The laboratory is not responsible for the product technical specification provided by the client.

2. Test Sites

2.1 Test Facilities

The tests and measurements refer to this report were performed by EMC testing Lab. of CVC Testing Technology Co., Ltd.

Add.: No.3, Tiantaiyi Road, Kaitai Avenue, Science City, Guangzhou, 510663, P. R. China

Telephone : +86-20-32293888

Fax : +86-20-32293889

2.2 Description of Non-standard Method and Deviations

The testing and measurement methods used in this report are applied by all standard methods. Not any non-standard method or deviation from the used standards was used.

2.3 List of Test and Measurement Instruments

Refer to **Appendix**.

3. Test Configuration

3.1 Test Mode

The EUT has been associated with peripherals and configuration operated in a manner tended to maximum rate data transmission its emission characteristics in a typical application.

4. Summary of measurement results

Summary of measurements of results	Clause in FCC rules	Class / Severity	Verdict
Conducted Emissions	FCC 47 CFR Part 15 Section 15.107	Class B	PASS
Radiated Emissions	FCC 47 CFR Part 15 Section 15.109	Class B	PASS

5. Measurement procedure

5.1 Conducted Emission

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	50%~56%	101.5kPa

Method of Measurement:

The EUT is placed on a non-metallic table of 80cm height above the horizontal metal reference ground plane. During the test, the EUT was operating in its typical mode. The test method is according to ANSI C63.4-2014. Connect the AC power line of the EUT to the L.I.S.N. Use EMI receiver to detect the average and Quasi-peak value. RBW is set to 9 kHz, VBW is set to 30kHz. The measurement result should include both L line and N line.

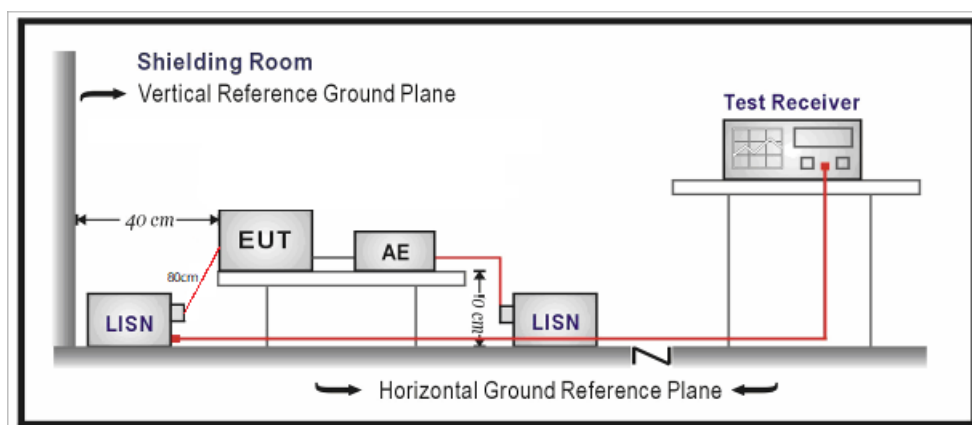
Limits:

Frequency (MHz)	Conducted Limits(dBμV)			
	Class B		Class A	
	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	66 to 56 *	56 to 46*	79	66
0.5 - 5	56	46	73	60
5 - 30	60	50	73	60

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

Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

Test Setup:



Note: AC Power source is used to change the voltage 120V/60Hz.

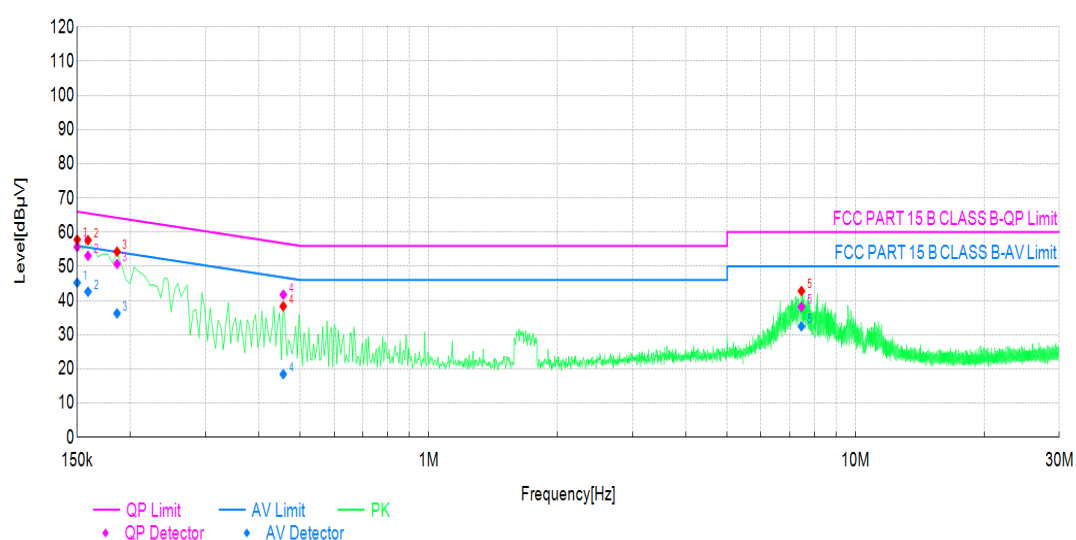
Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$. $U = 2.66$ dB.

Test Results:

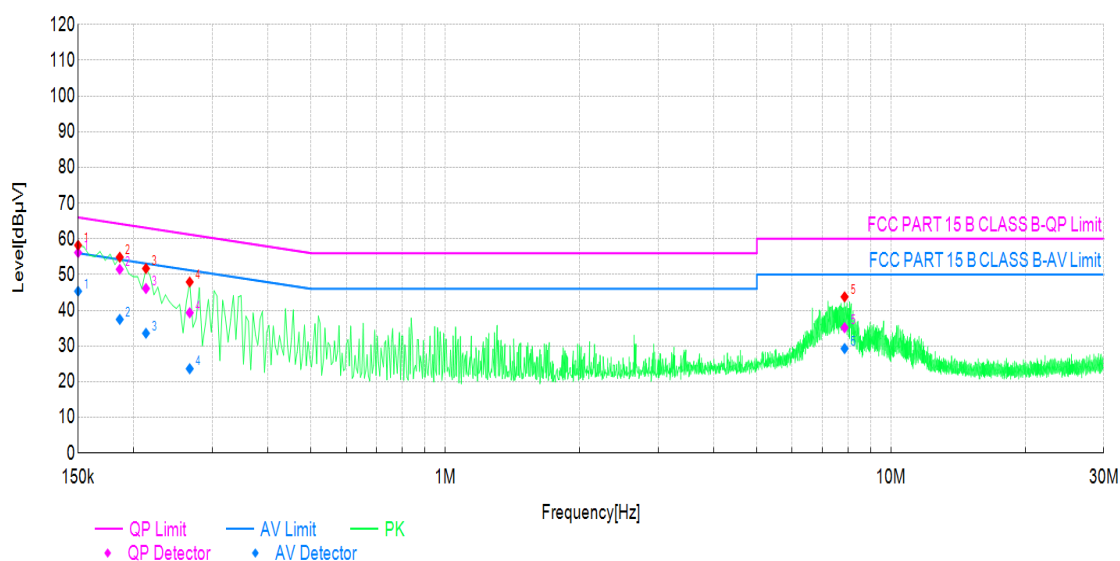
Power Line	L
Worst Case Operating Mode:	Typical operating condition

Conducted Emission					
Port: AC Power Line(Power line L)					
Freq. (MHz)	QP Limits (dB μ V)	QP Level (dB μ V)	Freq. (MHz)	AV Limits (dB μ V)	AV Level (dB μ V)
0.1500	66.00	55.68	0.1500	56.00	45.21
0.1590	65.52	53.08	0.1590	55.52	42.57
0.1860	64.21	50.71	0.1860	54.21	36.25
0.4560	56.77	41.70	0.4560	46.77	18.45
7.4670	60.00	38.14	7.4670	50.00	32.44



Power Line	N
Worst Case Operating Mode:	Typical operating condition

Conducted Emission					
Port: AC Power Line(Power line N)					
Freq. (MHz)	QP Limits (dBμV)	QP Level (dBμV)	Freq. (MHz)	AV Limits (dBμV)	AV Level (dBμV)
0.1500	66.00	56.15	0.1500	56.00	45.33
0.1860	64.21	51.48	0.1860	54.21	37.45
0.2130	63.09	46.10	0.2130	53.09	33.55
0.2670	61.21	39.30	0.2670	51.21	23.63
7.8675	60.00	35.12	7.8675	50.00	29.27



5.2 Radiated Emission

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement:

The test set-up was made in accordance to the general provisions of ANSI C63.4-2014. The Equipment Under Test (EUT) was set up on a non-conductive table in the semi-anechoic chamber. The test was performed at the distance of 3 m between the EUT and the receiving antenna. The radiated emissions measurements were made in a typical installation configuration.

Sweep the whole frequency band through the range from 9 kHz to the 10th harmonic of the carrier, and the emissions less than 20 dB below the permissible value are reported.

During the test, below 30MHz, the center of the loop shall be 1 meters; above 30MHz, the height of receive antenna shall be moved from 1 to 4 meters, and the antenna shall be performed under horizontal and vertical polarization. The turntable shall be rotated from 0 to 360 degrees for detecting the maximum of radiated spurious signal level. The measurements shall be repeated with orthogonal polarization of the test antenna. The data of cable loss and antenna factor has been calibrated in full testing frequency range before the testing.

Set the spectrum analyzer in the following:

Below 1GHz (detector: Peak and Quasi-Peak)

RBW=100kHz / VBW=300kHz / Sweep=AUTO

Above 1GHz(detector: Peak):

(a)PEAK: RBW=1MHz VBW=3MHz/ Sweep=AUTO

(b)AVERAGE: RBW=1MHz / VBW=3MHz / Sweep=AUTO

Limits for class B:

Limit in restricted band(Part 15.109)

Frequency (MHz)	Measurement Distance (m)	Field strength(uV/m)	Level (dBuV/m)
30 - 88	3	100	40
88 - 216	3	150	43.5
216 - 960	3	200	46
Above 960-1000	3	500	54

Note 1: The lower limit shall apply at the transition frequency.

Note 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.

Note 3: E field strength (dBuV/m) = 20 log E field strength (uV/m)

Limit in radiated emission measurement (Part 15.109)

Frequency(MHz)	Field strength(dBuV/m) @3m	
Above 1000	74(peak)	54(average)

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 on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Above 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.

Limits for class A:

Limit in restricted band(Part 15.109)

Frequency (MHz)	Measurement Distance (m)	Field strength(uV/m)	Level @10m (dBuV/m)	Level @3m (dBuV/m)
30 - 88	10	90	39	49.5
88 - 216	10	150	43.5	54
216 - 960	10	210	46.5	57
Above 960-1000	10	300	49.5	60

Note 1: The lower limit shall apply at the transition frequency.

Note 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.

Note 3: E field strength (dBuV/m) = 20 log E field strength (uV/m)

Note 4: The method for converting field strength from 10m to 3m:

$$E_{3m} = 20 \log_{10} \left(\frac{10}{3} \right) + E_{10m}$$

Limit in radiated emission measurement (Part 15.109)

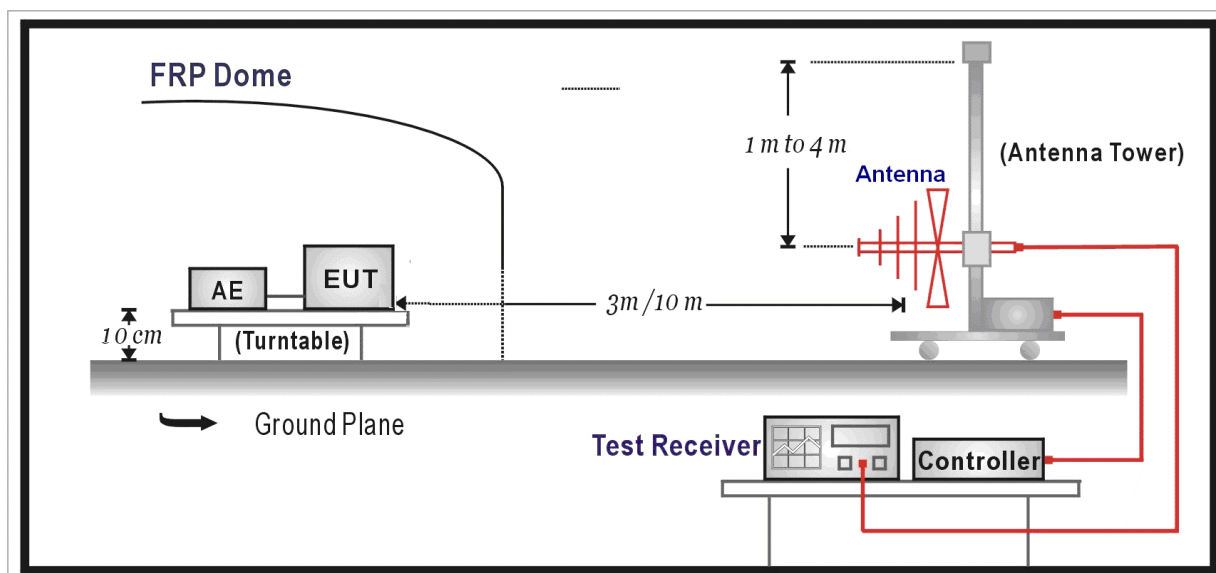
Frequency(MHz)	Field strength(dBuV/m) @3m	
Above 1000	80(peak)	60(average)

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:

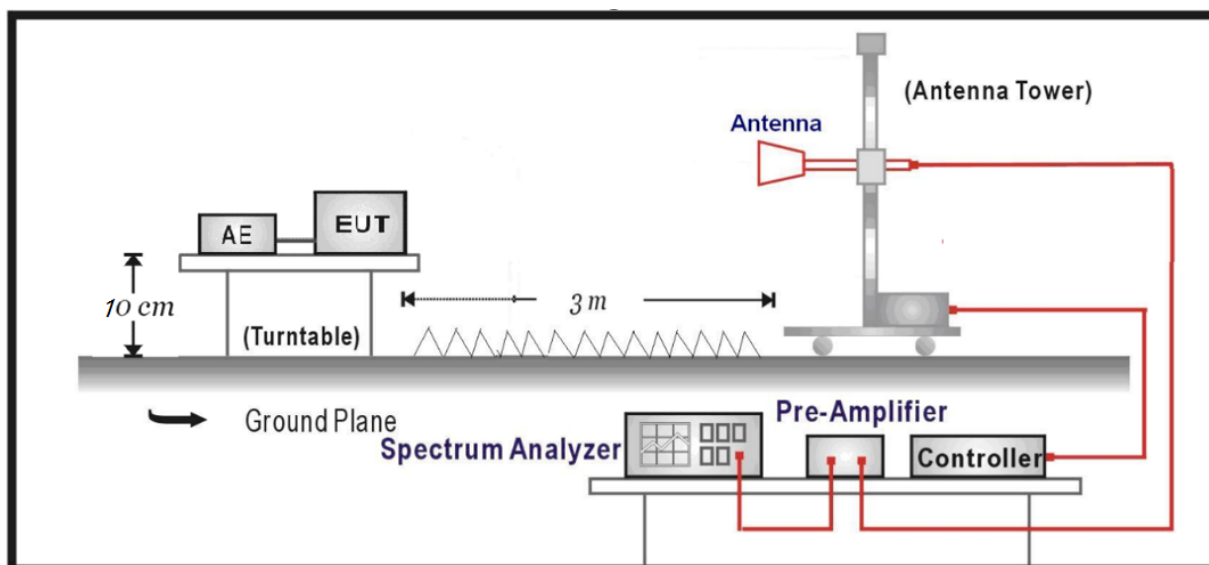
Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Above 1.705	30
1.705 - 108	1000
108 - 500	2000
500 - 1000	5000
Above 1000	5th harmonic of the highest frequency or 40 GHz, whichever is lower.

Test Setup:

Below 1GHz Test Setup:



Above 1GHz Test Setup:



Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$.

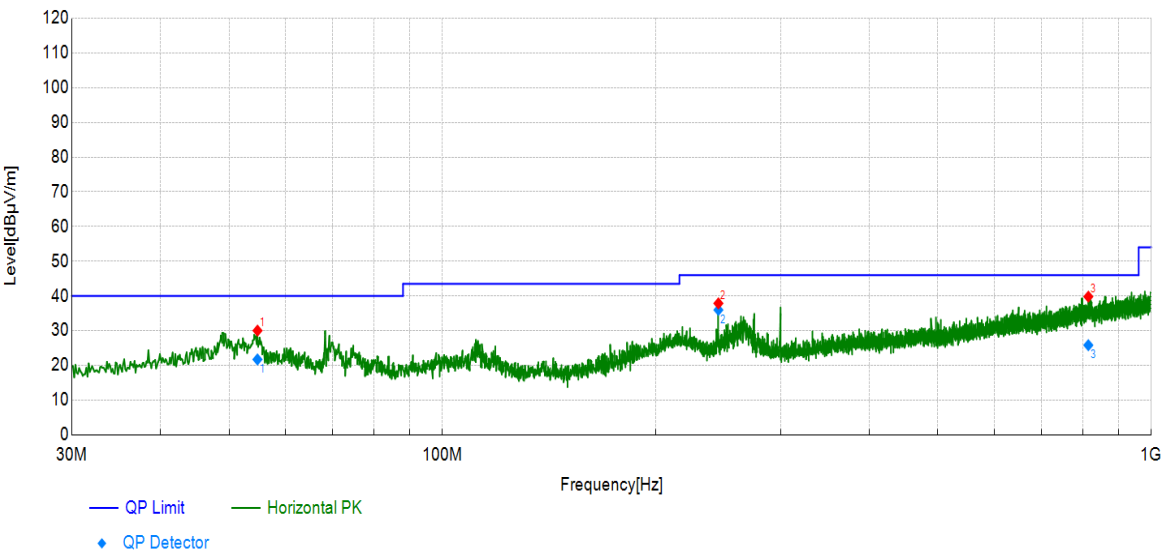
Frequency	Uncertainty
above 1G	4.84 dB
below 1G	4.10 dB

Test Results:

SPURIOUS EMISSIONS 30MHz~1GHz:

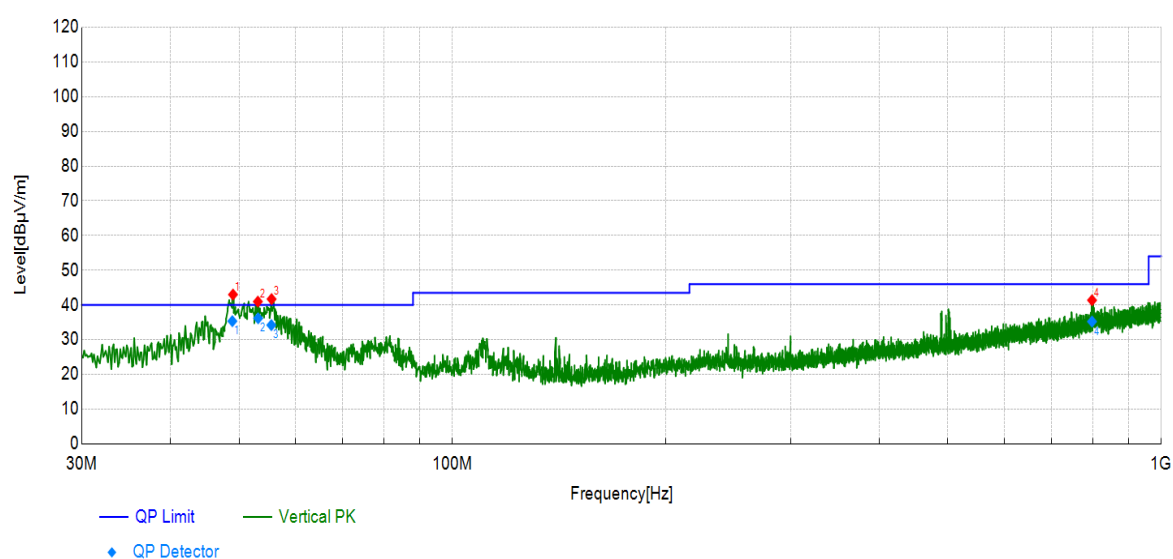
Radiated Emission	30MHz-1GHz
Polarity	Horizontal
Worst Case Operating Mode:	Typical operating condition

Final Data List								
Frequency [MHz]	Polarity	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Pass/Fail
54.84	Horizontal	-17.77	21.71	40.00	18.29	108.5	257	PASS
245.11	Horizontal	-17.39	35.97	46.00	10.03	109.2	48	PASS
815.03	Horizontal	-6.41	25.82	46.00	20.18	109.2	0	PASS



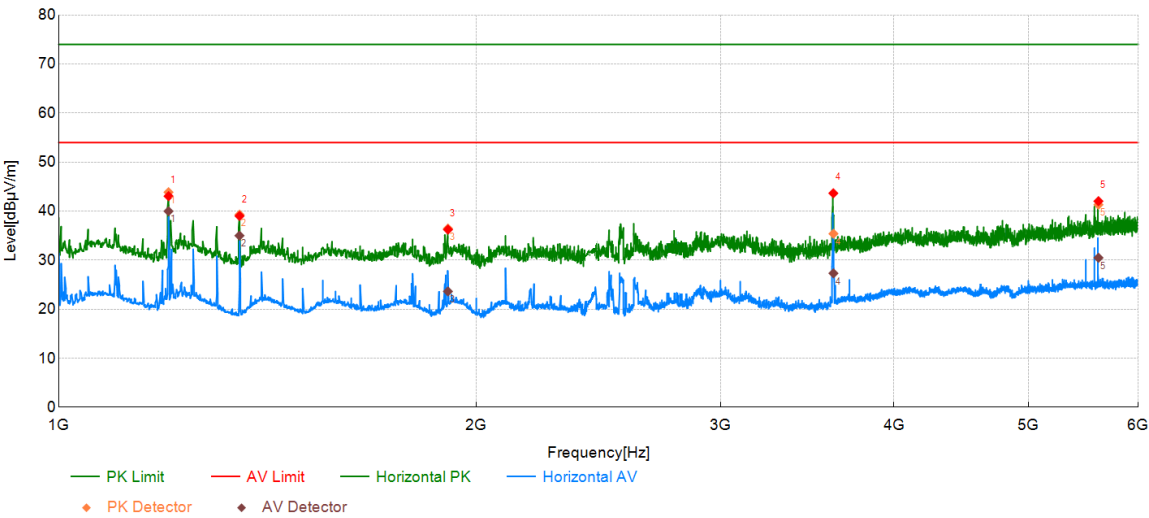
Radiated Emission	30MHz-1GHz
Polarity	Vertical
Worst Case Operating Mode:	Typical operating condition

Final Data List								
Frequency [MHz]	Polarity	Factor [dB]	QP Value [dB μ V/m]	QP Limit [dB μ V/m]	QP Margin [dB]	Height [cm]	Angle [°]	Pass/Fail
48.93	Vertical	-17.08	35.33	40.00	4.67	100.0	34	PASS
53.21	Vertical	-17.51	36.16	40.00	3.84	108.5	348	PASS
55.54	Vertical	-17.89	34.19	40.00	5.81	108.5	320	PASS
798.50	Vertical	-6.74	35.22	46.00	10.78	132.3	360	PASS



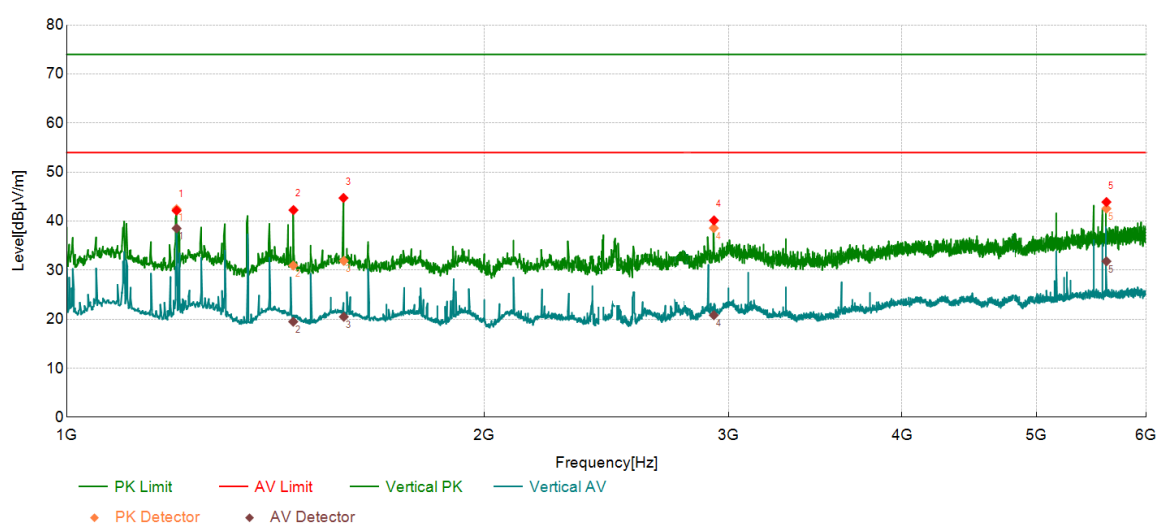
Radiated Emission	1GHz-6GHz
Polarity	Horizontal
Worst Case Operating Mode:	Typical operating condition

Frequency [MHz]	Polarity	Factor [dB]	PK Value [dBμV/m]	PK Limit [dBμV/m]	AV Value [dBμV/m]	AV Limit [dBμV/m]	Height [cm]	Angle [°]	Pass/Fail
1199.90	Horizontal	-6.11	43.86	74.00	39.99	54.00	100	226	PASS
1349.93	Horizontal	-5.97	39.29	74.00	35.01	54.00	100	301	PASS
1907.80	Horizontal	-5.00	36.45	74.00	23.64	54.00	100	276	PASS
3617.52	Horizontal	-3.35	35.40	74.00	27.33	54.00	100	260	PASS
5616.23	Horizontal	1.65	41.32	74.00	30.50	54.00	100	242	PASS



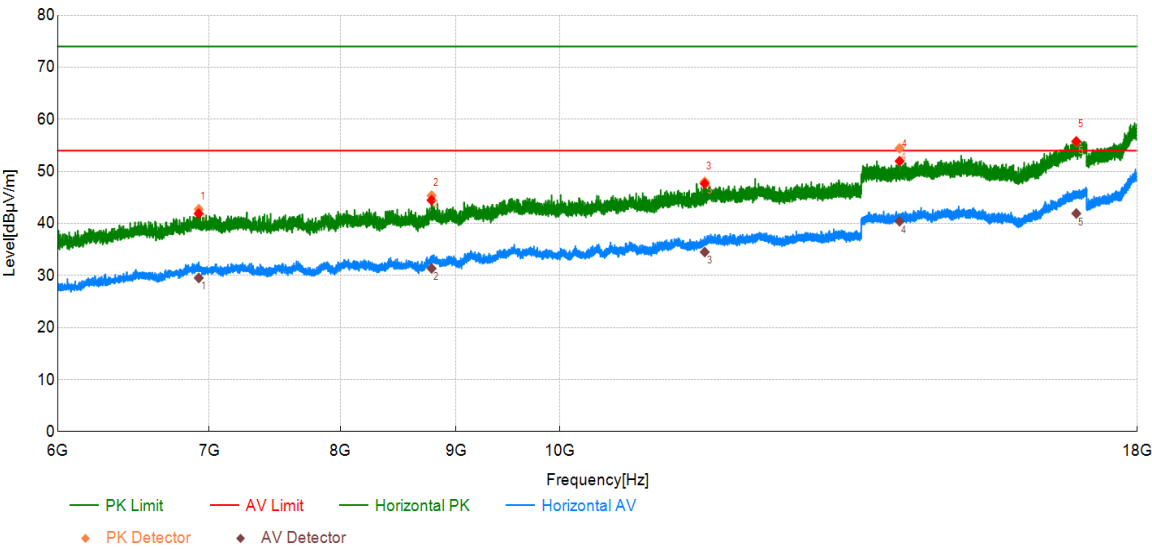
Radiated Emission	1GHz-6GHz
Polarity	Vertical
Worst Case Operating Mode:	Typical operating condition

Frequency [MHz]	Polarity	Factor [dB]	PK Value [dB μ V/m]	PK Limit [dB μ V/m]	AV Value [dB μ V/m]	AV Limit [dB μ V/m]	Height [cm]	Angle [°]	Pass/Fail
1200.02	Vertical	-6.11	42.44	74.00	38.53	54.00	100	292	PASS
1456.35	Vertical	-5.85	30.96	74.00	19.51	54.00	100	60	PASS
1583.86	Vertical	-5.62	31.91	74.00	20.50	54.00	100	60	PASS
2927.06	Vertical	-4.50	38.59	74.00	20.84	54.00	100	333	PASS
5615.96	Vertical	1.65	42.56	74.00	31.82	54.00	100	267	PASS



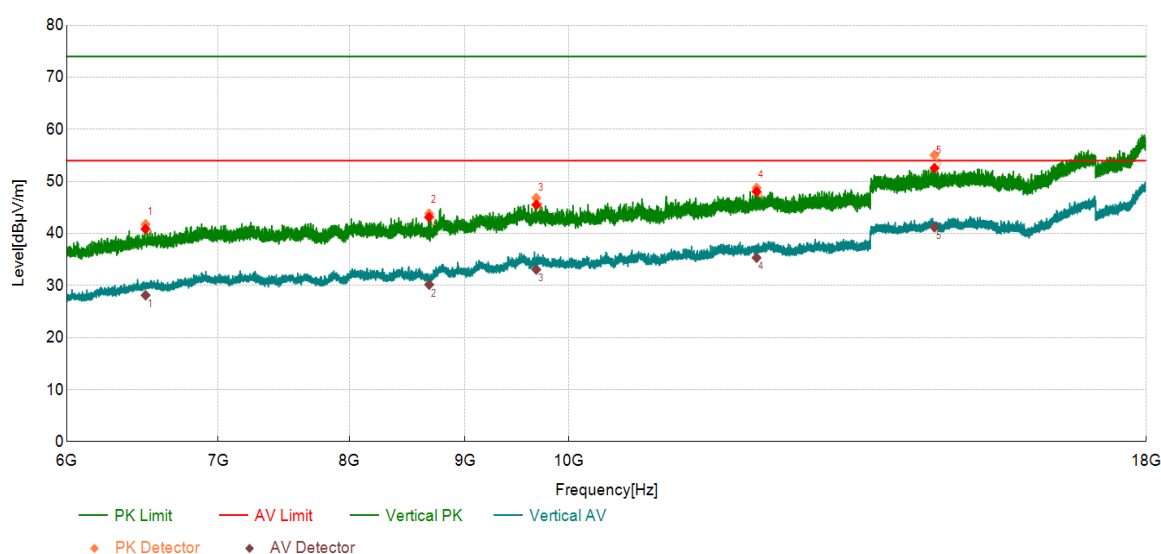
Radiated Emission	6GHz-18GHz
Polarity	Horizontal
Worst Case Operating Mode:	Typical operating condition

Frequency [MHz]	Polarity	Factor [dB]	PK Value [dBμV/m]	PK Limit [dBμV/m]	AV Value [dBμV/m]	AV Limit [dBμV/m]	Height [cm]	Angle [°]	Pass/Fail
6926.14	Horizontal	8.24	42.75	74.00	29.54	54.00	100	229	PASS
8777.50	Horizontal	10.48	45.36	74.00	31.37	54.00	100	313	PASS
11590.56	Horizontal	15.26	48.01	74.00	34.52	54.00	100	4	PASS
14131.67	Horizontal	17.70	54.43	74.00	40.42	54.00	100	256	PASS
16917.39	Horizontal	19.16	55.66	74.00	41.92	54.00	100	359	PASS



Radiated Emission	6GHz-18GHz
Polarity	Vertical
Worst Case Operating Mode:	Typical operating condition

Frequency [MHz]	Polarity	Factor [dB]	PK Value [dB μ V/m]	PK Limit [dB μ V/m]	AV Value [dB μ V/m]	AV Limit [dB μ V/m]	Height [cm]	Angle [°]	Pass/Fail
6501.48	Vertical	6.34	41.77	74.00	28.15	54.00	100	300	PASS
8676.36	Vertical	10.14	43.80	74.00	30.19	54.00	100	47	PASS
9675.56	Vertical	11.80	46.83	74.00	33.09	54.00	100	61	PASS
12106.94	Vertical	15.92	48.76	74.00	35.35	54.00	100	230	PASS
14509.27	Vertical	18.02	55.06	74.00	41.19	54.00	100	21	PASS



Note: 1. Quasi-Peak = Reading value + Correction factor

2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)

6. Measurement Equipment

Test Equipment	Type/Mode	Equipment No.	Manufacturer	Cal. Due
EMI Test Receiver	ESR3	EM-000520	R&S	2026-01-06
LISN	NSLK 8127	EM-000370	SCHWARZBECK	2026-07-03
Plus Limiter (#2)	VTSD 9561	EM-000367	SCHWARZBECK	2026-07-03
EMI Test Receiver	N9038A-508	EM-000397	Agilent	2025-12-26
EMI Test Receiver	ESR7	EM-000574	R&S	2026-01-06
Broadband Antenna(5m)	VULB 9163	EM-000736-1	SCHWARZBECK	2026-06-02
Waveguide Horn Antenna	HF906	EM-000093-8	R&S	2025-12-26
Semi-Anechoic Chamber(5m)	SAC-5	EM-000557	COMTEST	2027-02-01
TS+ (#2)	JS32-CE 3.0.0.1	/	/	/
TS+ (5m)	JS32-RE 5.0.0	/	/	/

_____ The End _____