

TEST REPORT

Applicant: Suzhou ZLN Auto-tech CO.,LTD.

Address of Applicant: Building A6, Tsinghua University Automotive Entrepreneurship Park, No. 81 Weizhong Road, Weitang Town, Xiangcheng District, Suzhou City, Jiangsu Province, China

Manufacturer/ Factory: Suzhou ZLN Auto-tech CO.,LTD.

Address of Manufacturer/ Factory: Building A6, Tsinghua University Automotive Entrepreneurship Park, No. 81 Weizhong Road, Weitang Town, Xiangcheng District, Suzhou City, Jiangsu Province, China

Equipment Under Test (EUT)

Product Name: Sensor

Model No.: PM01, PM02, PM03, PM04, PM05, PM06, PM07, PM08

FCC ID: 2BWQR-PM01

Applicable standards: FCC CFR Title 47 Part 15 Subpart C Section 15.231

Date of sample receipt: April 14, 2026

Date of Test: April 17, 2026 ~ June 02, 2026

Date of report issued: June 05, 2026

Test Result : PASS *

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:



Laboratory Manager

This results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

2 Version

Version No.	Date	Description
00	June 05, 2026	Original

Tested By:

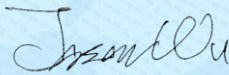


Date:

June 05, 2026

Test Engineer

Prepared By:

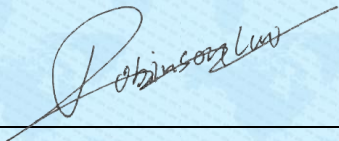


Date:

June 05, 2026

Project Engineer

Check By:



Date:

June 05, 2026

Reviewer

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4 Test Summary

Test Item	Section in	Result
Antenna requirement	CFR 47 15.203	Pass
Conduction Emission	CFR 47 15.207	N/A
Field strength of the fundamental signal	CFR 47 15.231(e)	Pass
Spurious emissions	CFR 47 15.231(e) & 15.209	Pass
Occupy Bandwidth	CFR 47 15.231(c)	Pass
Dwell time	CFR 47 15.231(e)	Pass

Remarks:

1. Pass: The EUT complies with the essential requirements in the standard.
2. N/A: not applicable

4.1 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	$\pm 7.25 \times 10^{-8}$
2	Duty cycle	$\pm 0.37\%$
3	Occupied Bandwidth	$\pm 3\%$
4	RF conducted power	$\pm 0.75\text{dB}$
5	RF power density	$\pm 3\text{dB}$
6	Conducted Spurious emissions	$\pm 2.58\text{dB}$
7	AC Power Line Conducted Emission	$\pm 3.44\text{dB}$ (0.15MHz ~ 30MHz)
8	Radiated Spurious emission test	$\pm 3.1\text{dB}$ (9kHz-30MHz)
		$\pm 3.8039\text{dB}$ (30MHz-200MHz)
		$\pm 3.9679\text{dB}$ (200MHz-1GHz)
		$\pm 4.29\text{dB}$ (1GHz-18GHz)
		$\pm 3.30\text{dB}$ (18GHz-40GHz)
9	Temperature test	$\pm 1^\circ\text{C}$
10	Humidity test	$\pm 3\%$
11	Time	$\pm 3\%$

5 General Information

5.1 General Description of EUT

Product Name:	Sensor
Model Name:	PM01
Additional Model:	PM02, PM03, PM04, PM05, PM06, PM07, PM08
Model Description:	The Sensor manufactured by our company is a programmable sensor. The internal firmware can be configured using LF programming tools to modify the transmitted data definition only. The programming function does not change the RF hardware, operating frequency (315 MHz and 433.92 MHz), modulation characteristics, or RF output power. This feature enables a single Sensor platform to support multiple product types while maintaining identical RF characteristics. The Sensor is available in eight models: PM01, PM02, PM03, PM04, PM05, PM06, PM07, and PM08. All models are electrically identical with respect to their RF circuitry and differ only in firmware configuration and model designation.
Test Model No.:	GTSL2026050684-1-1
S/N:	/
Test sample(s) ID:	GTSL2026050684-1
Sample(s) Status	Engineer sample
Operation Frequency:	433.92MHz
Modulation type:	ASK, FSK
Antenna Type:	wire antenna
Antenna gain:	-15.87dBi
Power supply:	DC 3V

Disclaimer statement:

1. Antenna gain information provided by the customer, and the laboratory is not responsible for its authenticity.
2. The information in this section is provided by the applicant or manufacturer, GTS is not liable to the accuracy, suitability, reliability or/and integrity of the information.

5.2 Test mode

Transmitting mode	Keep the EUT in transmitting mode.
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Per-test mode.

We have verified the construction and function in typical operation, The EUT was placed on three different polar directions; i.e. X axis, Y axis, Z axis. which was shown in this test report (Only show the worst case:Y axis) and defined as follows:

ASK:

433.92MHz	Axis	X	Y	Z
	Field Strength(dBuV/m)	80.46	79.68	80.24

FSK

433.92MHz	Axis	X	Y	Z
	Field Strength(dBuV/m)	76.52	75.17	74.83

Final Test Mode:

According to ANSI C63.10 standards, the test results are both the “worst case” and “worst setup”:
Y axis (see the test setup photo)

5.3 Test Facility

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

- **FCC—Registration No.: 381383**

Designation Number: CN5029

Global United Technology Services Co., Ltd., Shenzhen 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 files.

- **ISED—Registration No.: 9079A**

CAB identifier: CN0091

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of ISED for radio equipment testing

- **NVLAP (LAB CODE:600179-0)**

Global United Technology Services Co., Ltd., is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP).

5.4 Test Location

All tests were performed at:

Global United Technology Services Co., Ltd.

No. 123- 128, Tower A, Jinyuan Business Building, No.2, Laodong Industrial Zone,
Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102

Tel: 0755-27798480

Fax: 0755-27798960

5.5 Description of Support Units

None.

5.6 Deviation from Standards

None.

5.7 Abnormalities from Standard Conditions

None.

5.8 Other Information Requested by the Customer

None.

6 Test Instruments list

Radiated Emission:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	Apr. 10, 2026	Apr. 09, 2027
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	Apr. 10, 2026	Apr. 09, 2027
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9168	GTS640	Apr. 11, 2026	Apr. 10, 2027
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120 D	GTS208	Apr. 11, 2026	Apr. 10, 2027
6	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	GTS575	Jul 17, 2026	Jul 16, 2027
7	Loop Antenna	ZHINAN	ZN30900A	GTS534	Nov.22, 2025	Nov.21, 2026
8	Broadband Preamplifier	SCHWARZBECK	BBV9718	GTS535	Apr. 10, 2026	Apr. 09, 2027
9	Amplifier(1GHz-26.5GHz)	HP	8449B	GTS601	Apr. 10, 2026	Apr. 09, 2027
10	Horn Antenna (18GH-40GHz)	Schwarzbeck	BBHA 9170	GTS691	Apr. 11, 2026	Apr. 10, 2027
11	Spectrum analyzer (9kHz-40GHz)	Rohde & Schwarz	FSV40-N	GTS666	Mar. 10, 2026	Mar. 09, 2027
12	Amplifier	/	LNA-1000-30S	GTS650	Apr. 10, 2026	Apr. 09, 2027
13	CDNE M2+M3-16A	HCT	30MHz-300MHz	GTS692	Nov. 24, 2025	Nov. 23, 2026
14	Wideband Amplifier	/	WDA-01004000-15P35	GTS602	Apr. 10, 2026	Apr. 09, 2027
15	Thermo meter	JINCHUANG	GSP-8A	GTS643	Apr. 13, 2026	Apr. 12, 2027
16	RE cable 1	GTS	N/A	GTS675	Jul. 17, 2026	Jul. 16, 2027
17	RE cable 2	GTS	N/A	GTS676	Jul. 17, 2026	Jul. 16, 2027
18	RE cable 3	GTS	N/A	GTS677	Jul. 17, 2026	Jul. 16, 2027
19	RE cable 4	GTS	N/A	GTS678	Jul. 17, 2026	Jul. 16, 2027
20	RE cable 5	GTS	N/A	GTS679	Jul. 17, 2026	Jul. 16, 2027
21	RE cable 6	GTS	N/A	GTS680	Jul. 17, 2026	Jul. 16, 2027
22	RE cable 7	GTS	N/A	GTS681	Jul. 22, 2026	Jul. 21, 2027
23	RE cable 8	GTS	N/A	GTS682	Jul. 22, 2026	Jul. 21, 2027
24	CE cable 9	GTS	N/A	GTS683	Jul. 23, 2026	Jul. 22, 2027
25	EMI Test Software	AUDIX	E3-6.100614a	GTS725	N/A	N/A

RF Conducted Test:						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	MXA Signal Analyzer	Agilent	N9020A	GTS566	Apr. 10, 2026	Apr. 09, 2027
2	EMI Test Receiver	R&S	ESCI 7	GTS552	Apr. 11, 2026	Apr. 10, 2027
3	PSA Series Spectrum Analyzer	Agilent	E4440A	GTS536	Apr. 10, 2026	Apr. 09, 2027
4	MXG vector Signal Generator	Agilent	N5182A	GTS567	Apr. 10, 2026	Apr. 09, 2027
5	ESG Analog Signal Generator	Agilent	E4428C	GTS568	Apr. 10, 2026	Apr. 09, 2027
6	Wideband Power Meter	Keysight	N1924A	GTS673	Apr. 11, 2026	Apr. 10, 2027
7	USB RF Power Sensor	DARE	RPR3006W	GTS569	Apr. 10, 2026	Apr. 09, 2027
8	RF Switch Box	Shongyi	RFSW3003328	GTS571	Apr. 10, 2026	Apr. 09, 2027
9	Programmable Constant Temp & Humi Test Chamber	WEWON	WHTH-150L-40-880	GTS572	Apr. 10, 2026	Apr. 09, 2027
10	Thermo meter	JINCHUANG	GSP-8A	GTS641	Apr. 14, 2026	Apr. 13, 2027
11	EXA Signal Analyzer	Keysight	N9010B	MY60241168	Nov. 01, 2025	Oct. 31, 2026

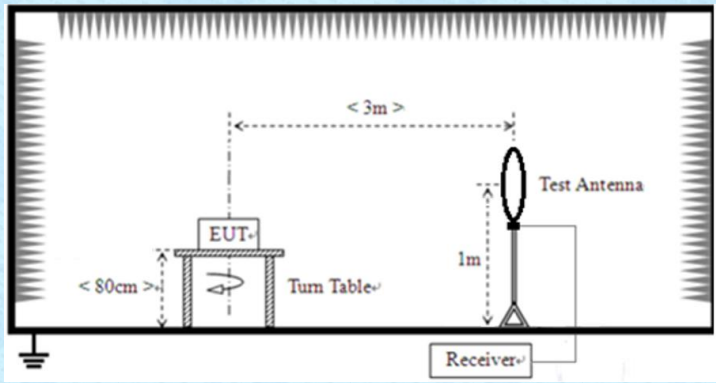
General used equipment:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	Barometer	KUMAO	SF132	GTS647	Jul. 16, 2025	Jul. 15, 2026

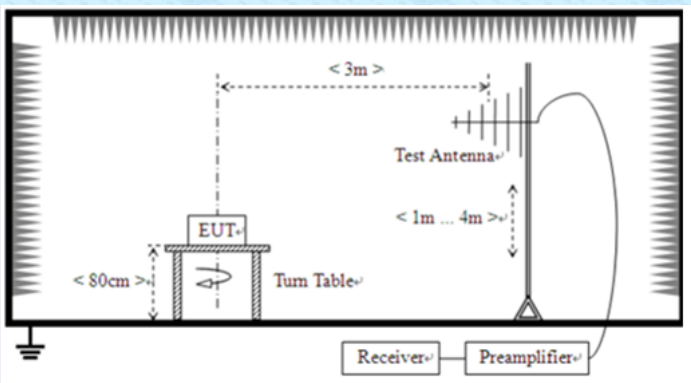
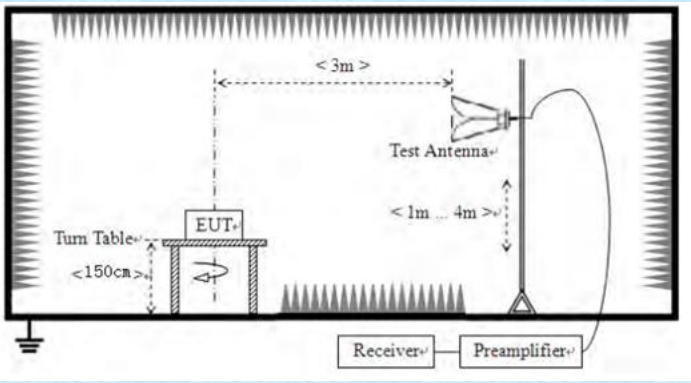
7 Test results and Measurement Data

7.1 Antenna requirement

Standard requirement:	FCC Part15 C Section 15.203
15.203 requirement: An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.	
EUT Antenna:	
The antenna is wire antenna, reference to the EUT constructional details.	

7.2 Radiated Emission Method

Test Requirement:	FCC Part15 C Section 15.209				
Test Method:	ANSI C63.10:2020				
Test Frequency Range:	9kHz to 6000MHz				
Test site:	Measurement Distance: 3m				
Receiver setup:	Frequency	Detector	RBW	VBW	Value
	9KHz-150KHz	Quasi-peak	200Hz	600Hz	Quasi-peak
	150KHz-30MHz	Quasi-peak	9KHz	30KHz	Quasi-peak
	30MHz-1GHz	Quasi-peak	120KHz	300KHz	Quasi-peak
	Above 1GHz	Peak	1MHz	3MHz	Peak
		Peak	1MHz	10Hz	Average
Limit: (Field strength of the fundamental signal)	Frequency	Limit (dBuV/m @3m)		Remark	
	433.92MHz	72.87		Average Value	
		92.87		Peak Value	
Limit: (Spurious Emissions)	Frequency	Limit (uV/m)	Value	Measurement Distance	
	0.009MHz-0.490MHz	2400/F(KHz)	QP	300m	
	0.490MHz-1.705MHz	24000/F(KHz)	QP	30m	
	1.705MHz-30MHz	30	QP	30m	
	30MHz-88MHz	100	QP	3m	
	88MHz-216MHz	150	QP		
	216MHz-960MHz	200	QP		
	960MHz-1GHz	500	QP		
	Above 1GHz	500	Average		
		5000	Peak		
Or The maximum permitted unwanted emission level is 20 dB below the maximum permitted fundamental level whichever limit permits a higher field strength.					
Test setup:	Below 30MHz				
					
Below 1GHz					

	 Above 1GHz 
Test Procedure:	1. The EUT was placed on the top of a rotating table (0.8 meters for below 1GHz and 1.5 meters for above 1GHz) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test environment:	Temp.: 25 °C Humid.: 50% Press.: 1 010mbar
Test voltage:	DC 3V
Test results:	Pass

Measurement data:

7.2.1 Field Strength of The Fundamental Signal

433.92-ASK

Peak value:

Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Pol	Verdict
433.92	59.51	79.37	19.86	92.87	13.5	100	167	PK	Horizontal	PASS
433.92	60.04	80.34	20.30	92.87	12.53	100	68	PK	Vertical	PASS

Average value:

Frequency (MHz)	Peak Value (dBuV/m)	Duty cycle factor	Average value (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarization
433.92	79.37	-10.75	68.62	72.87	4.25	Horizontal
433.92	80.34	-10.75	69.59	72.87	3.28	Vertical

Remarks:

- Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
- PK Value under PK limit more than 20db, then pass for AV value.

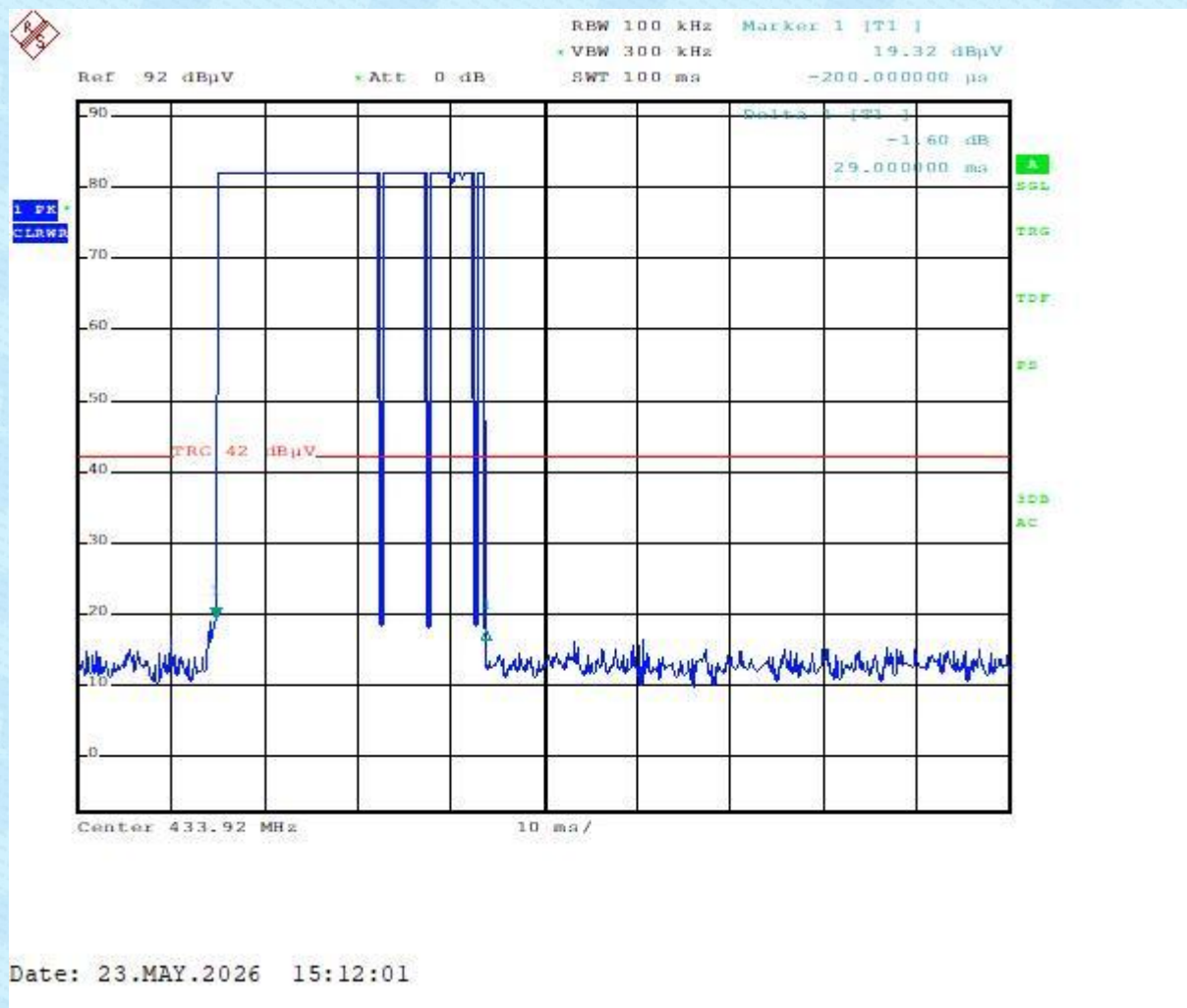
Average value:	
Calculate Formula:	Average value=Peak value + Duty Cycle Factor
	Duty cycle factor=20 log(Duty cycle)
	Duty cycle=on time/100 milliseconds or period, whichever is less
Test data:	T on time =29(ms)
	T period =100(ms)
	Duty cycle=0.29
	duty cycle factor=-10.75

The formula as below:

T on time=29

Duty cycle= T on time/ T period=29/100=0.29

Test plot as follows:



433.92-FSK

Peak value:

Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Pol	Verdict
433.92	53.06	72.92	19.86	92.87	19.95	100	300	PK	Horizontal	PASS
433.92	56.06	76.36	20.30	92.87	16.51	100	87	PK	Vertical	PASS

Average value:

Frequency (MHz)	Peak Value (dBuV/m)	Duty cycle factor	Average value (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarization
433.92	72.92	-10.63	62.29	72.87	10.58	Horizontal
433.92	76.36	-10.63	65.73	72.87	7.14	Vertical

Remarks:

- Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
- PK Value under PK limit more than 20db, then pass for AV value.

Average value:

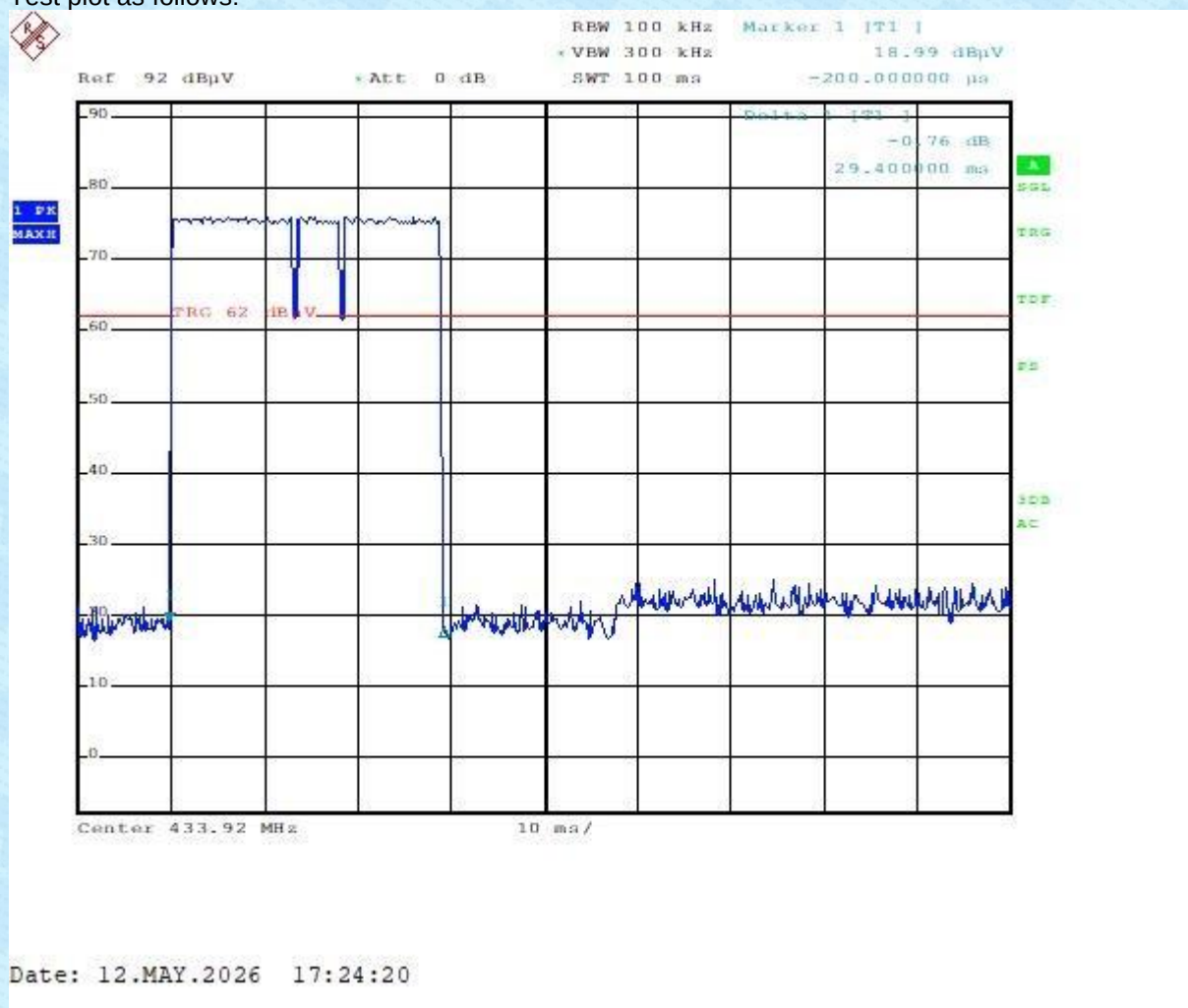
Calculate Formula:	Average value=Peak value + Duty Cycle Factor
	Duty cycle factor=20 log(Duty cycle)
	Duty cycle=on time/100 milliseconds or period, whichever is less
Test data:	T on time =29.4(ms)
	T period =100(ms)
	Duty cycle=0.294
	duty cycle factor=-10.63

The formula as below:

T on time=29.4

Duty cycle= T on time/ T period=29.4/100=0.294

Test plot as follows:



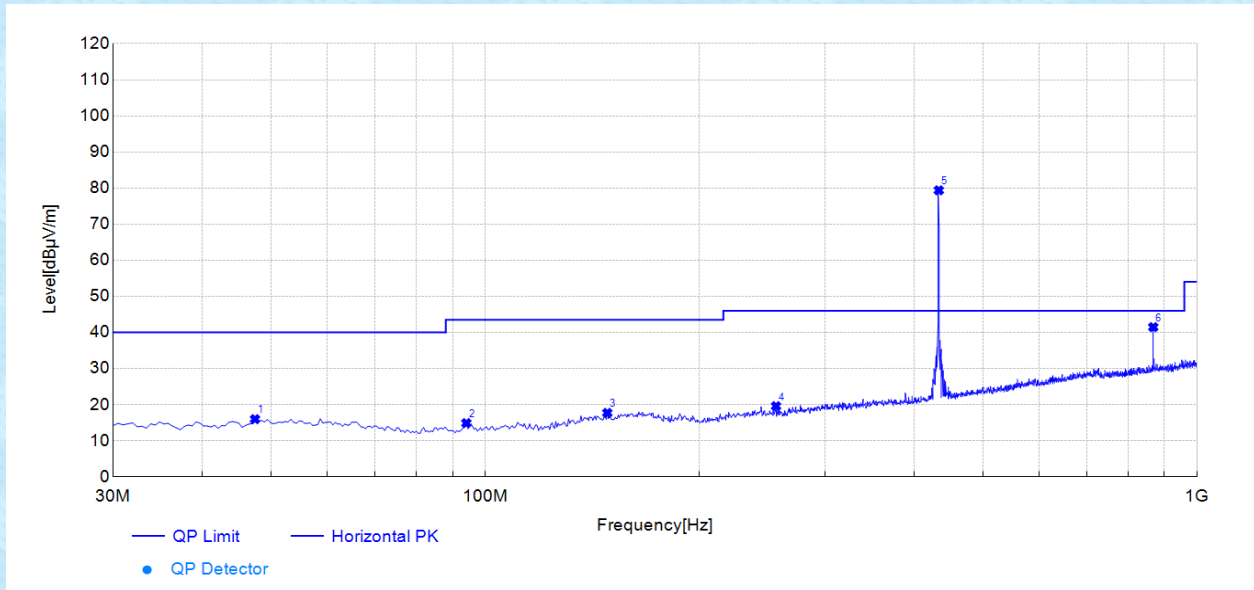
7.2.2 Spurious emissions

Measurement data:

9 kHz ~ 30 MHz

The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.

Below 1GHz: 433.92MHz-ASK

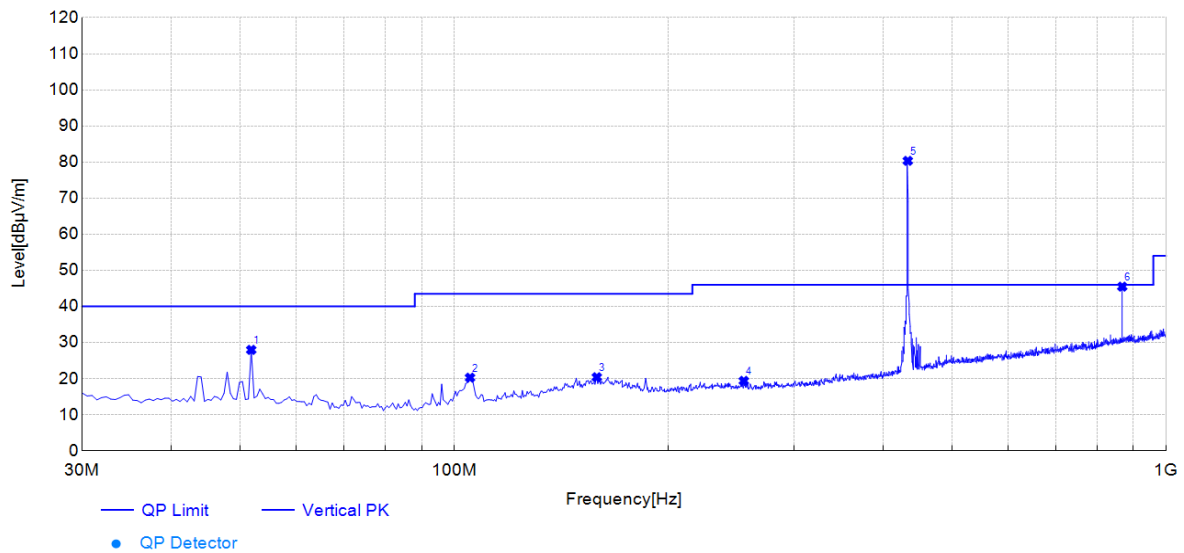


Suspected Data List

NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Pol	Verdict
1	47.47	1.92	15.98	14.06	40.00	24.02	100	187	PK	Horizontal	PASS
2	94.05	3.08	14.88	11.80	43.50	28.62	100	305	PK	Horizontal	PASS
3	148.40	2.60	17.72	15.12	43.50	25.78	100	151	PK	Horizontal	PASS
4	256.12	3.61	19.59	15.98	46.00	26.41	100	271	PK	Horizontal	PASS
5	433.72	59.51	79.37	19.86	92.87	13.5	100	167	PK	Horizontal	PASS
6	868.01	14.65	41.47	26.82	72.87	31.4	100	167	PK	Horizontal	PASS

AV

Frequency [MHz]	Peak [dBμV/m]	Duty cycle Corrected Factor [dB]	Corrected Amplitude [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Verdict
434	79.37	-10.75	68.62	72.87	4.25	100	167	PASS
868	41.47	-10.75	30.72	52.87	22.15	100	167	PASS

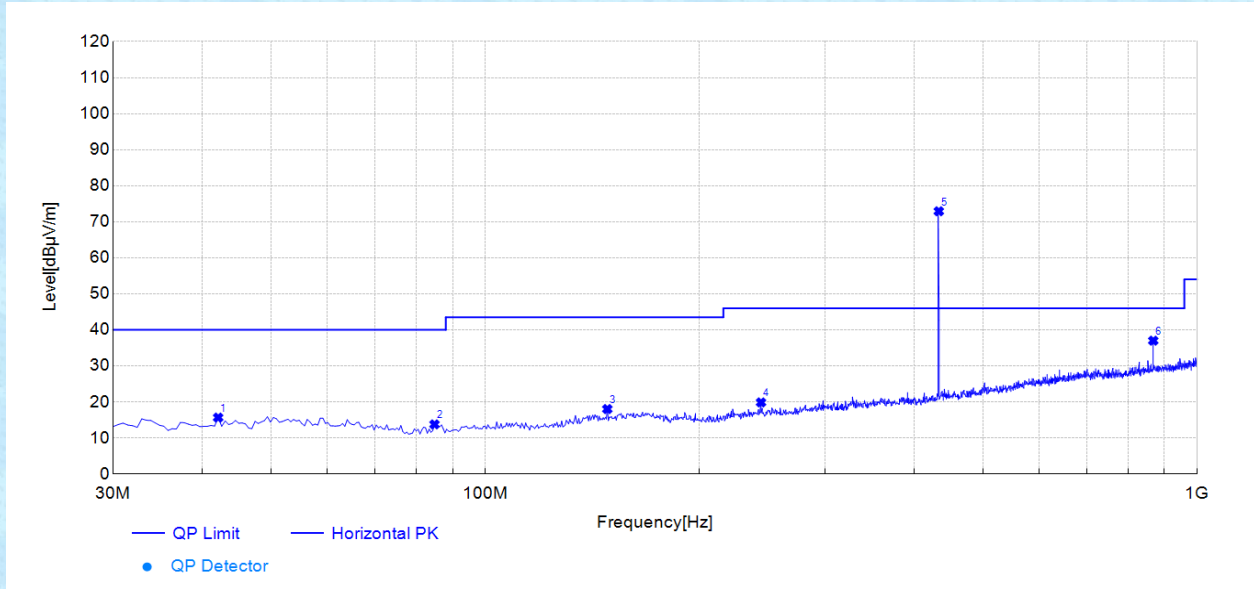
**Suspected Data List**

NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Pol	Verdict
1	51.84	14.72	27.97	13.25	40.00	12.03	100	131	PK	Vertical	PASS
2	105.21	7.66	20.27	12.61	43.50	23.23	100	318	PK	Vertical	PASS
3	158.59	2.63	20.40	17.77	43.50	23.10	100	110	PK	Vertical	PASS
4	255.15	3.32	19.39	16.07	46.00	26.61	100	334	PK	Vertical	PASS
5	433.72	60.04	80.34	20.30	92.87	12.53	100	68	PK	Vertical	PASS
6	868.01	17.76	45.48	27.72	72.87	27.39	100	328	PK	Vertical	PASS

AV

Frequency [MHz]	Peak [dBμV/m]	Duty cycle Corrected Factor [dB]	Corrected Amplitude [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Verdict
434	80.34	-10.75	69.59	72.87	3.28	100	68	PASS
868	45.48	-10.75	34.73	52.87	18.14	100	328	PASS

433.92MHz-FSK

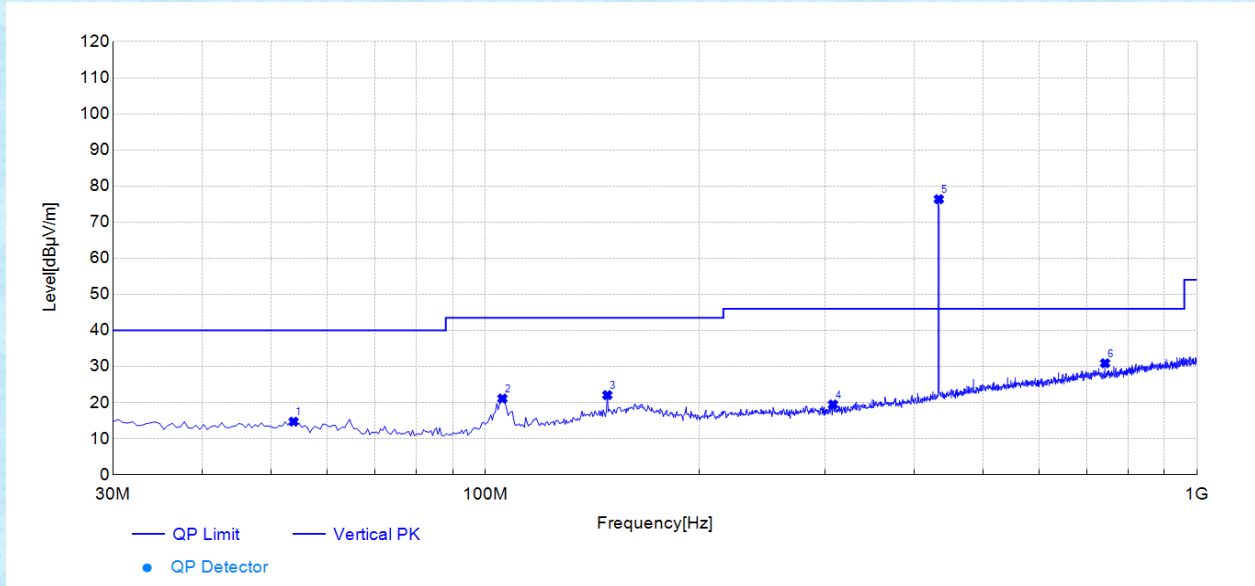


Suspected Data List

NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Pol	Verdict
1	42.13	2.23	15.67	13.44	40.00	24.33	100	68	PK	Horizontal	PASS
2	84.83	2.32	13.78	11.46	40.00	26.22	100	7	PK	Horizontal	PASS
3	148.40	2.91	18.03	15.12	43.50	25.47	100	358	PK	Horizontal	PASS
4	243.99	4.26	19.88	15.62	46.00	26.12	100	189	PK	Horizontal	PASS
5	433.72	53.06	72.92	19.86	92.87	19.95	100	300	PK	Horizontal	PASS
6	868.01	10.19	37.01	26.82	72.87	35.86	100	300	PK	Horizontal	PASS

AV

Frequency [MHz]	Peak [dBμV/m]	Duty cycle Corrected Factor [dB]	Corrected Amplitude [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Verdict
434	72.92	-10.63	62.29	72.87	10.58	100	300	PASS
868	37.01	-10.63	26.38	52.87	26.49	100	300	PASS



Suspected Data List

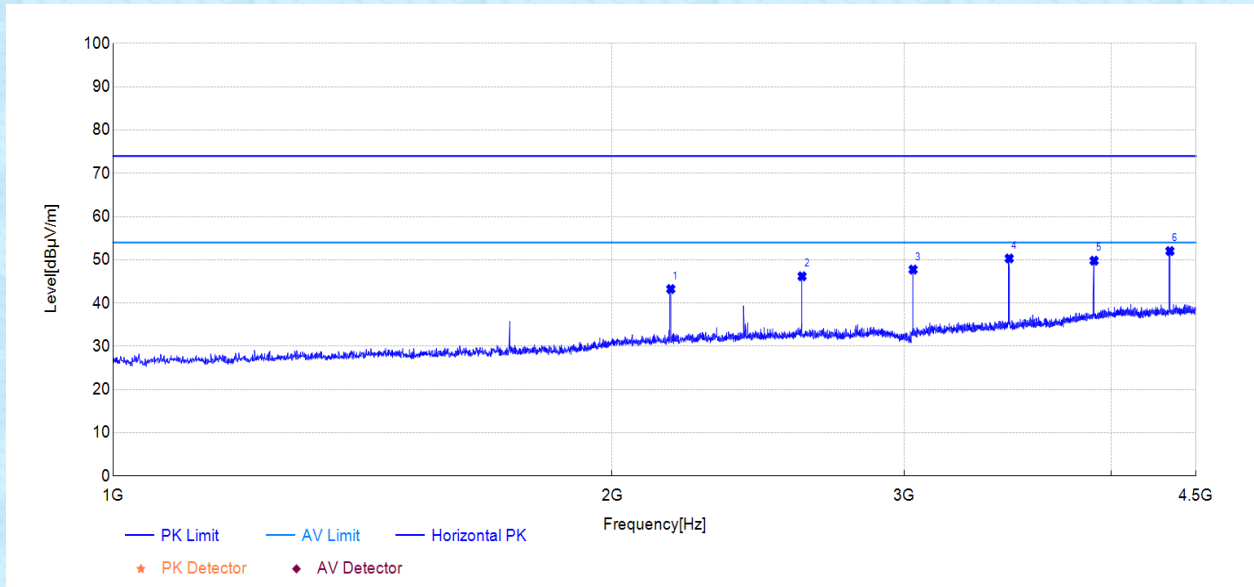
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Pol	Verdict
1	53.78	1.62	14.74	13.12	40.00	25.26	100	147	PK	Vertical	PASS
2	105.70	8.49	21.13	12.64	43.50	22.37	100	53	PK	Vertical	PASS
3	148.40	5.07	22.09	17.02	43.50	21.41	100	235	PK	Vertical	PASS
4	308.04	2.52	19.49	16.97	46.00	26.51	100	114	PK	Vertical	PASS
5	433.72	56.06	76.36	20.30	92.87	16.51	100	87	PK	Vertical	PASS
6	742.82	5.29	30.92	25.63	46.00	15.08	100	344	PK	Vertical	PASS

AV

Frequency [MHz]	Peak [dBμV/m]	Duty cycle Corrected Factor [dB]	Corrected Amplitude [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Verdict
434	76.36	-10.63	65.73	72.87	7.14	100	87	PASS

Above 1G:

ASK:



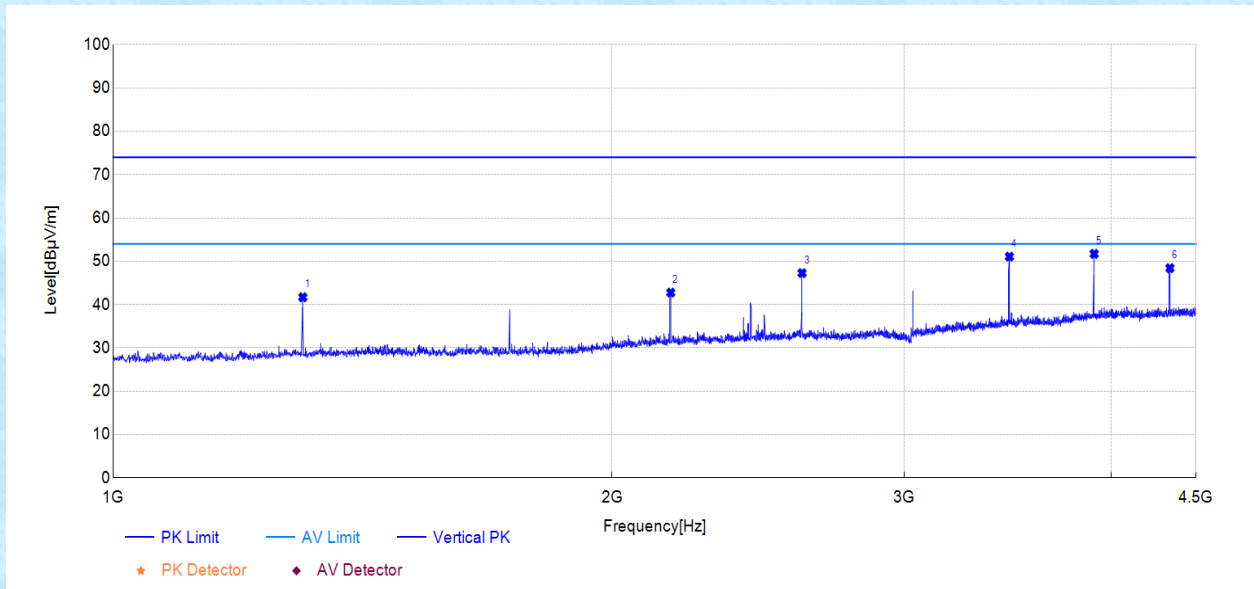
Suspected Data List

NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Pol	Verdict
1	2169.58	60.55	43.24	-17.31	74.00	30.76	150	307	PK	Horizontal	PASS
2	2603.58	61.92	46.19	-15.73	74.00	27.81	150	110	PK	Horizontal	PASS
3	3037.58	62.03	47.74	-14.29	74.00	26.26	150	11	PK	Horizontal	PASS
4	3471.58	62.90	50.32	-12.58	74.00	10.18	150	9	PK	Horizontal	PASS
5	3905.58	59.04	49.80	-9.24	74.00	11.20	150	9	PK	Horizontal	PASS
6	4339.58	59.74	52.03	-7.71	74.00	18.47	150	11	PK	Horizontal	PASS

Note:(1)Level=Reading+Factor

(2)Margin=Limit-Level

(3) If the average limit is met when using a Peak detector, the EUT shall be deemed to meet both peak and average limits. And measurement with the average detector is unnecessary.



Suspected Data List

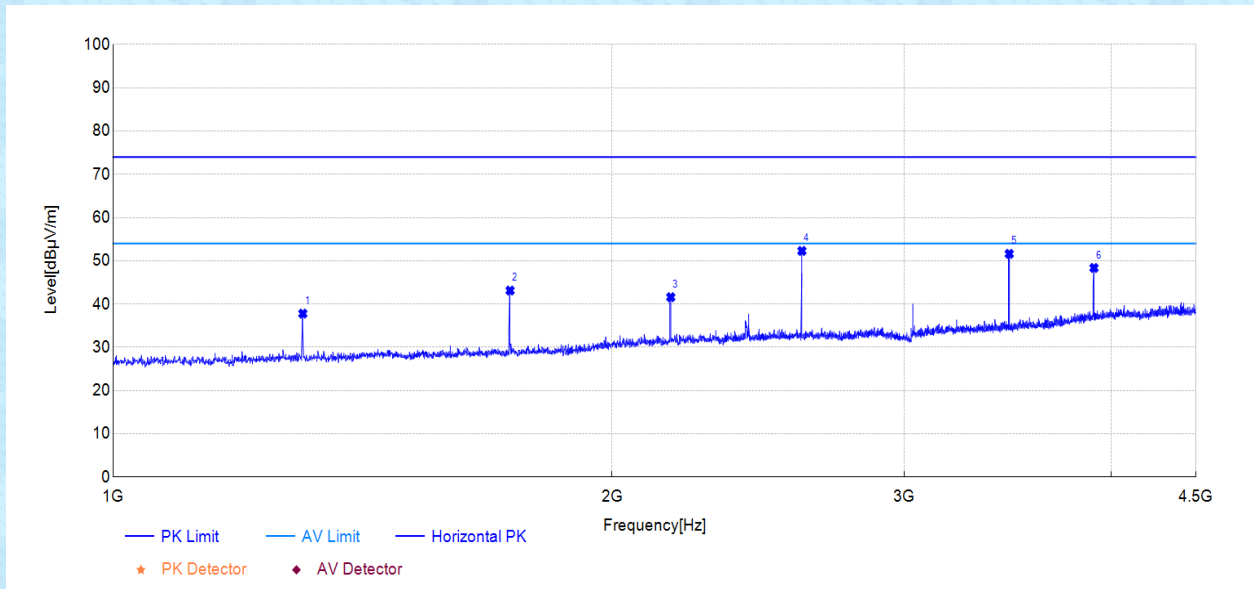
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Pol	Verdict
1	1301.58	63.71	41.69	-22.02	74.00	32.31	150	253	PK	Vertical	PASS
2	2169.58	60.10	42.76	-17.34	74.00	31.24	150	155	PK	Vertical	PASS
3	2603.58	62.88	47.27	-15.61	74.00	26.73	150	155	PK	Vertical	PASS
4	3472.17	62.60	51.07	-11.53	74.00	16.93	150	57	PK	Vertical	PASS
5	3906.17	60.58	51.71	-8.87	74.00	17.79	150	353	PK	Vertical	PASS
6	4339.58	56.19	48.41	-7.78	74.00	25.59	150	255	PK	Vertical	PASS

Note:(1)Level=Reading+Factor

(2)Margin=Limit-Level

(3) If the average limit is met when using a Peak detector, the EUT shall be deemed to meet both peak and average limits. And measurement with the average detector is unnecessary.

FSK:



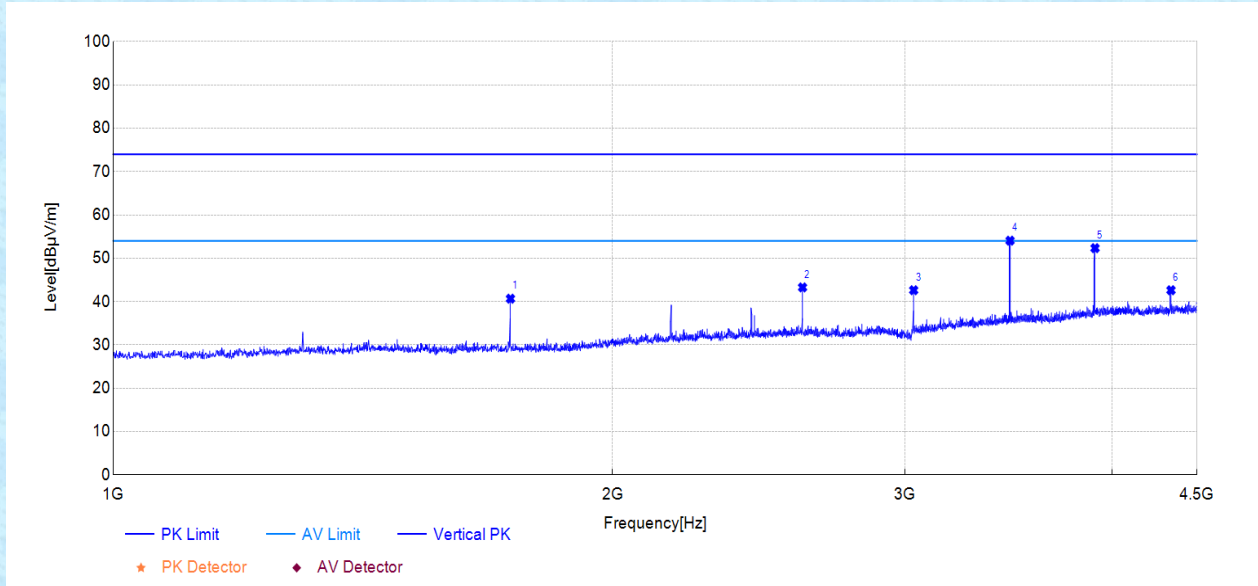
Suspected Data List

NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Pol	Verdict
1	1301.58	60.66	37.80	-22.86	74.00	36.20	150	172	PK	Horizontal	PASS
2	1735.58	63.01	43.13	-19.88	74.00	30.87	150	269	PK	Horizontal	PASS
3	2169.58	58.90	41.59	-17.31	74.00	32.41	150	271	PK	Horizontal	PASS
4	2603.00	68.02	52.29	-15.73	74.00	21.71	150	172	PK	Horizontal	PASS
5	3471.58	64.20	51.62	-12.58	74.00	15.38	150	269	PK	Horizontal	PASS
6	3905.00	57.59	48.35	-9.24	74.00	25.65	150	269	PK	Horizontal	PASS

Note:(1)Level=Reading+Factor

(2)Margin=Limit-Level

(3) If the average limit is met when using a Peak detector, the EUT shall be deemed to meet both peak and average limits. And measurement with the average detector is unnecessary.



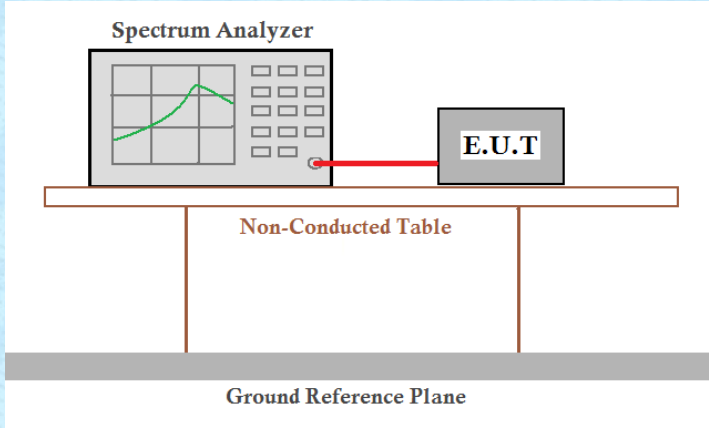
Suspected Data List											
NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Pol	Verdict
1	1735.58	60.16	40.66	-19.50	74.00	33.34	150	191	PK	Vertical	PASS
2	2603.00	58.88	43.27	-15.61	74.00	30.73	150	91	PK	Vertical	PASS
3	3037.00	56.65	42.62	-14.03	74.00	31.38	150	93	PK	Vertical	PASS
4	3471.58	65.60	54.07	-11.53	74.00	19.93	150	93	PK	Vertical	PASS
5	3906.17	61.20	52.33	-8.87	74.00	21.67	150	91	PK	Vertical	PASS
6	4340.17	50.40	42.62	-7.78	74.00	31.38	150	286	PK	Vertical	PASS

Note:(1)Level=Reading+Factor

(2)Margin=Limit-Level

(3) If the average limit is met when using a Peak detector, the EUT shall be deemed to meet both peak and average limits. And measurement with the average detector is unnecessary.

7.3 Occupy Bandwidth

Test Requirement:	FCC Part15 C Section 15.231 (c)
Test Method:	ANSI C63.10:2020
Limit:	The bandwidth of the emission shall be no wider than 0.25% of the center frequency for devices operating above 70 MHz and below 900MHz. For devices operating above 900 MHz, the emission shall be no wider than 0.5% of the center frequency. Bandwidth is determined at the points 20 dB down from the modulated carrier.
Test setup:	 The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T. (Equipment Under Test) via a red cable. Both are placed on a Non-Conducted Table, which is supported by a Ground Reference Plane.
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.3 for details
Test results:	Pass

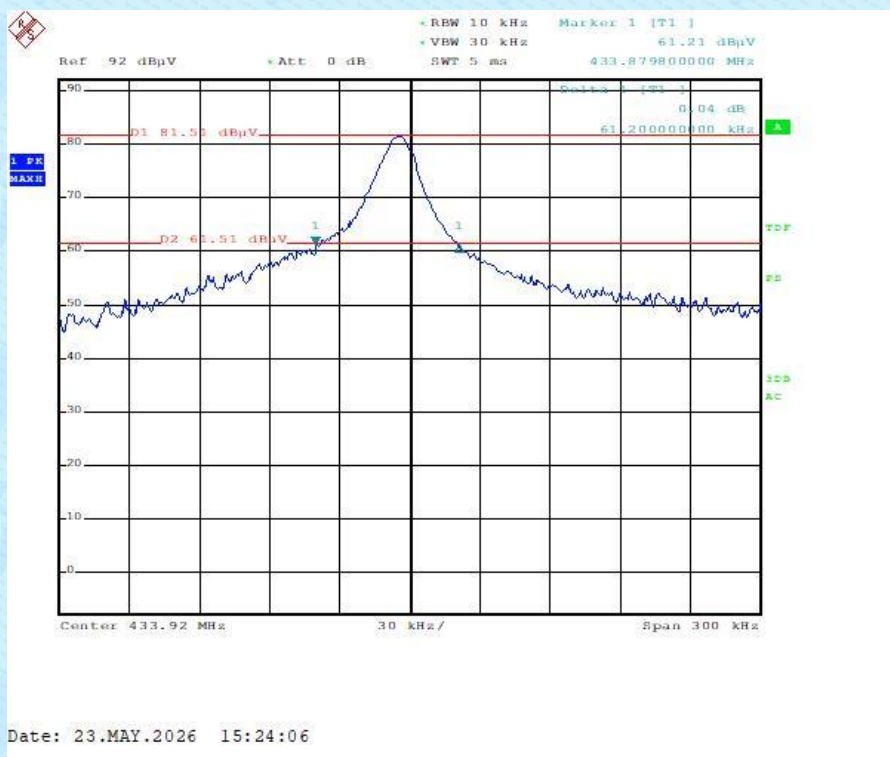
Measurement Data

Test Frequency (MHz)	Modulation	20dB bandwidth (kHz)	Limit (MHz)	Result
433.92	ASK	61.20	1.0848	Pass
433.92	FSK	230.80	1.0848	Pass

Note: Limit= Fundamental frequency×0.25%

Test plot as follows:

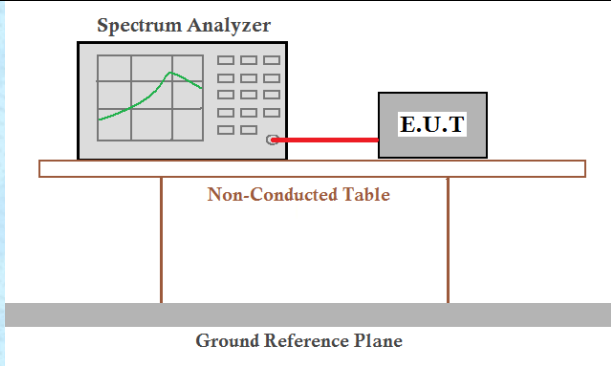
ASK



FSK



7.4 Dwell time

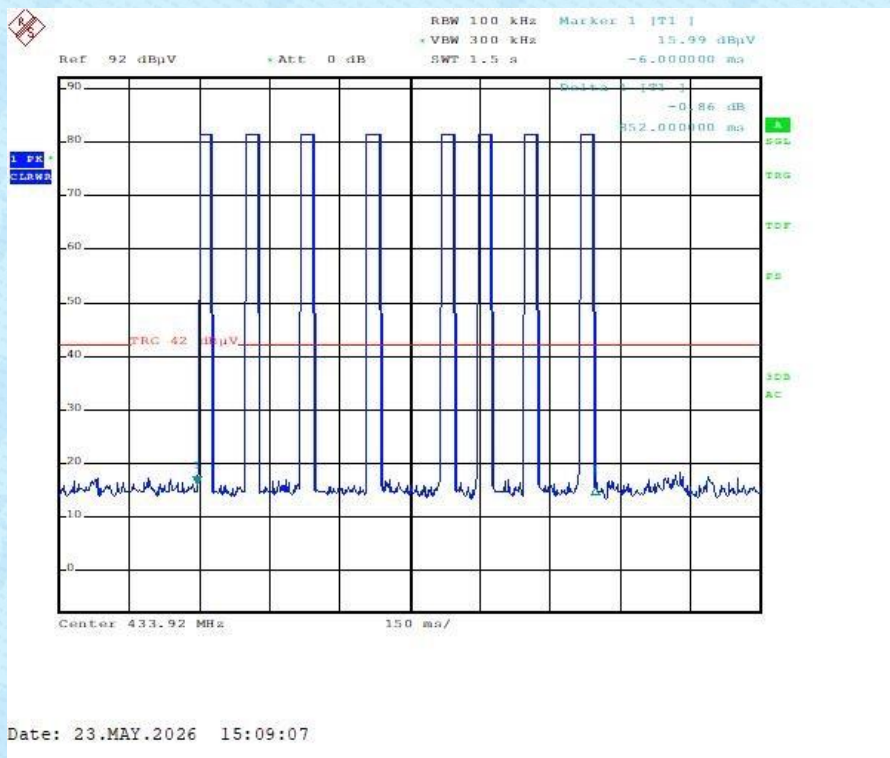
Test Requirement:	FCC Part15 C Section 15.231 (e)
Test Method:	ANSI C63.10:2020
Receiver setup:	RBW=100kHz, VBW=300kHz, span=0Hz, detector: Peak
Limit:	Not more than 1 seconds
Test setup:	
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

Measurement data:

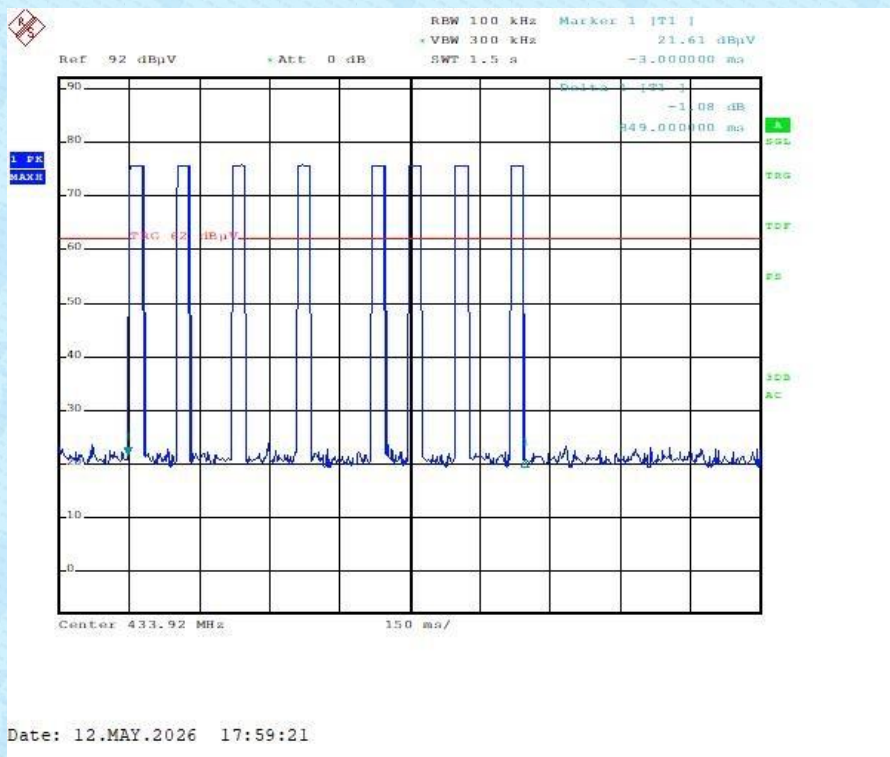
Test Frequency (MHz)	Modulation	Duration of each TX (second)	Limit (second)	Result
433.92	ASK	0.852	<1.0	Pass
433.92	FSK	0.849	<1.0	Pass

Test plot as follows:

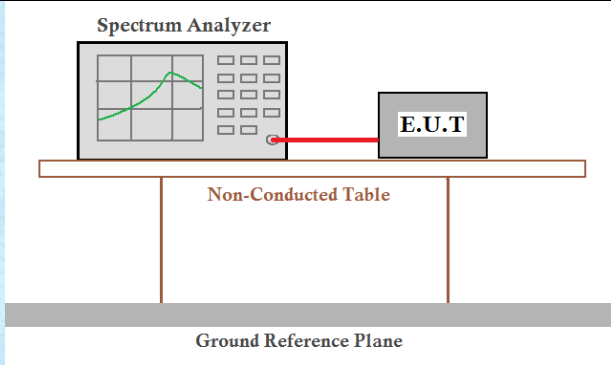
ASK



FSK



7.5 Silent period

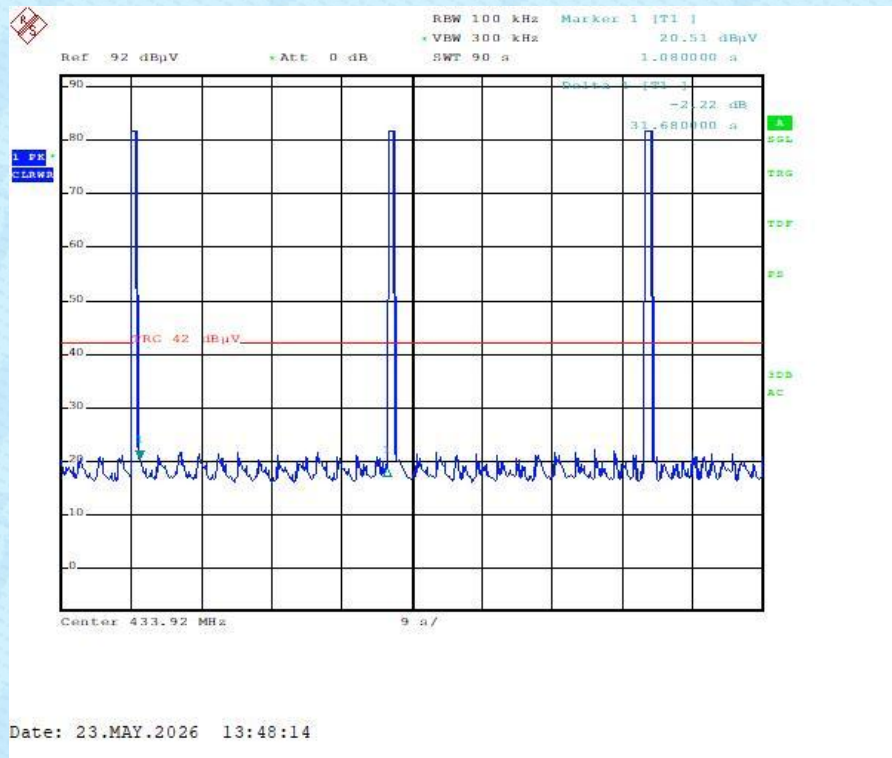
Test Requirement:	FCC Part15 C Section 15.231 (e)
Test Method:	ANSI C63.10:2020
Receiver setup:	RBW=100kHz, VBW=300kHz, span=0Hz, detector: Peak
Limit:	at least 30 times the duration of the transmission or more than 10 seconds
Test Procedure:	1. According to the follow Test-setup, keep the relative position between the artificial antenna and the EUT. 2. Set the EUT to proper test channel. 3. Single scan the transmit, and read the transmission time.
Test setup:	
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

Measurement data:

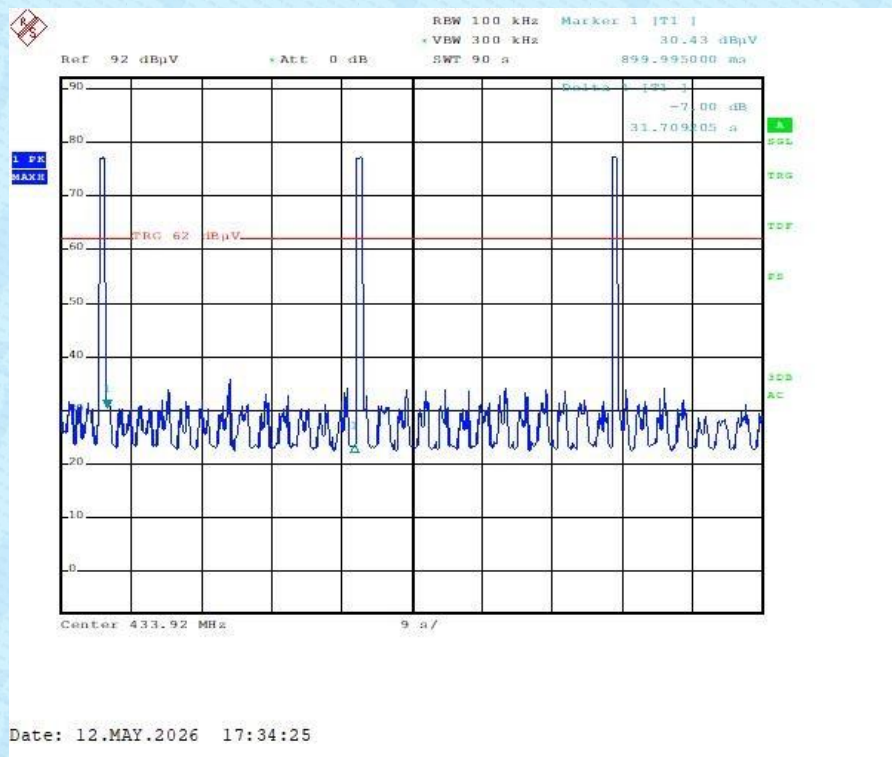
Test Frequency (MHz)	Modulation	Silent period (second)	Limit (second)	Result
433.92	ASK	31.680	>10	Pass
433.92	FSK	31.709	>10	Pass

Test plot as follows:

ASK



FSK



8 Test Setup Photo

Reference to the **appendix I** for details.

9 EUT Constructional Details

Reference to the **appendix II** for details.

-----End-----