

FCC EMC Test Report


Applicant: Autel Robotics Co., Ltd.

Address of Applicant: 18th Floor, Block C1, Nanshan iPark, No. 1001 Xueyuan Avenue, Nanshan District, Shenzhen, Guangdong, 518055, China

Equipment Under Test (EUT)

Product Name: Autel Tracker

Model No.: DFAT-1

Trade Mark: 

FCC ID: 2AGNTDFAT240958A

Applicable Standards: FCC CFR Title 47 Part 15B

Date of Sample Receipt: 06 Sep., 2022

Date of Test: 07 Sep., to 28 Sep., 2022

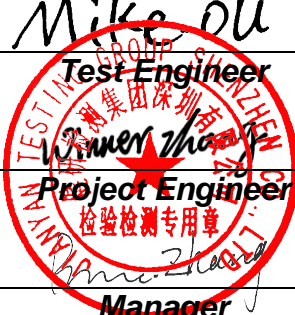
Date of report Issued: 29 Sep., 2022

Test Result: PASS

Tested by: Mike DU **Date:** 29 Sep., 2022
Test Engineer

Reviewed by: Wenwen Zhang **Date:** 29 Sep., 2022
Project Engineer

Approved by: Wenwen Zhang **Date:** 29 Sep., 2022
Manager



This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in above the application standard version. Test results reported herein relate only to the item(s) tested.

This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

1 Version

Version No.	Date	Description
00	29 Sep., 2022	Original

2 Contents

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3 General Information

3.1 Client Information

Applicant:	Autel Robotics Co., Ltd.
Address:	18th Floor, Block C1, Nanshan iPark, No. 1001 Xueyuan Avenue, Nanshan District, Shenzhen, Guangdong, 518055, China
Manufacturer:	Autel Robotics Co., Ltd.
Address:	18th Floor, Block C1, Nanshan iPark, No. 1001 Xueyuan Avenue, Nanshan District, Shenzhen, Guangdong, 518055, China
Factory:	Autel Robotics Co., Ltd. Guangming Branch
Address:	No.701, Jixie Factory, Building 4, Yanxiang Technology Industrial Park, Gaoxin Road, Dongzhou Community, Guangming street, Guangming district, Shenzhen, Guangdong, China

3.2 General Description of E.U.T.

Product Name:	Autel Tracker
Model No.:	DFAT-1
Power Supply:	Rechargeable Li-ion Battery DC22.2V,6550mAh
AC Adapter:	Adapter 1 Model: DF_CHARGER Input: AC100-240V, 50/60Hz, 4.0A Output : 26.4V, 7A Adapter 2 Model: DF_CHARGER Input: AC100-240V, 50/60Hz, 4.0A Output: 26.4V, 7A
Test Sample Condition:	The test samples were provided in good working order with no visible defects.

3.3 Test Mode

Operating Mode	Detail Description
Charging mode	Use the adapter 1 to keep the EUT battery in Charging mode
Power on & Working mode	Use the adapter 2 to keep the EUT in Power on & Working mode (worst-case)
Charging & Working mode	Use the adapter to keep the EUT in Charging & Working mode
GPS mode	Keep the EUT in GPS receiver mode

The sample was placed 0.8m above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages.

3.4 Description of Test Auxiliary Equipment

Manufacturer	Description	Model	S/N	FCC ID/DoC
/				

3.5 Description of Cable Used

Cable Type	Description	Length	From	To
/				

3.6 Measurement Uncertainty

Parameter	Expanded Uncertainty (Confidence of 95%(U = 2Uc(y)))
Conducted Emission for LISN (9kHz ~ 150kHz)	±3.11 dB
Conducted Emission for LISN (150kHz ~ 30MHz)	±2.62 dB
Radiated Emission (30MHz ~ 1GHz) (3m SAC)	±4.45 dB
Radiated Emission (1GHz ~ 18GHz) (3m SAC)	±5.34 dB

Note: All the measurement uncertainty value were shown with a coverage $k=2$ to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

3.7 Additions to, Deviations, or Exclusions from the Method

No

3.8 Laboratory Facility

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

- **FCC - Designation No.: CN1211**

JianYan Testing Group Shenzhen Co., Ltd. has been accredited as a testing laboratory by FCC(Federal Communications Commission). The test firm Registration No. is 727551.

- **ISED – CAB identifier.: CN0021**

The 3m Semi-anechoic chamber and 10m Semi-anechoic chamber of JianYan Testing Group Shenzhen Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

- **CNAS - Registration No.: CNAS L15527**

JianYan Testing Group Shenzhen Co., Ltd. is accredited to ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L15527.

- **A2LA - Registration No.: 4346.01**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: <https://portal.a2la.org/scopepdf/4346-01.pdf>

3.9 Laboratory Location

JianYan Testing Group Shenzhen Co., Ltd.

Address: No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China.

Tel: +86-755-23118282, Fax: +86-755-23116366

Email: info-JYTee@lets.com, Website: <http://jyt.lets.com>

3.10 Test Instruments List

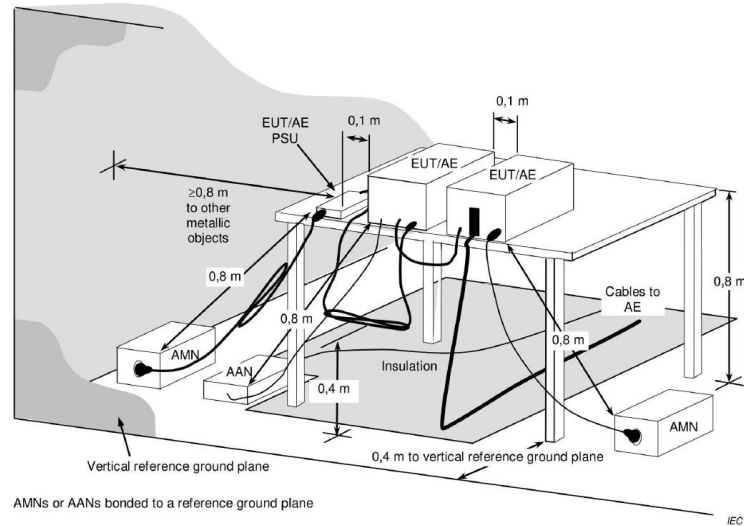
Radiated Emission(3m SAC):					
Test Equipment	Manufacturer	Model No.	Manage No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
3m SAC	ETS	9m*6m*6m	WXJ001-1	04-14-2021	04-13-2024
BiConiLog Antenna	Schwarzbeck	VULB9163	WXJ002	03-08-2022	03-07-2023
Horn Antenna	Schwarzbeck	BBHA9120D	WXJ002-2	03-08-2022	03-07-2023
Pre-amplifier (30MHz ~ 1GHz)	Schwarzbeck	BBV9743B	WXJ001-2	01-20-2022	01-19-2023
Pre-amplifier (1GHz ~ 18GHz)	SKET	LNPA_0118G-50	WXJ001-3	01-20-2022	01-19-2023
EMI Test Receiver	Rohde & Schwarz	ESRP7	WXJ003-1	03-05-2022	03-04-2023
Spectrum Analyzer	Rohde & Schwarz	FSP 30	WXJ004	01-20-2022	01-19-2023
Coaxial Cable (30MHz ~ 1GHz)	JYTSZ	JYT3M-1G-NN-8M	WXG001-4	01-20-2022	01-19-2023
Coaxial Cable (1GHz ~ 18GHz)	JYTSZ	JYT3M-18G-NN-8M	WXG001-5	01-20-2022	01-19-2023
Band Reject Filter Group	Tonscend	JS0806-F	WXJ089	N/A	
Test Software	Tonscend	TS+	Version: 3.0.0.1		

Conducted Emission:					
Test Equipment	Manufacturer	Model No.	Manage No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
EMI Test Receiver	Rohde & Schwarz	ESR3	WXJ003-2	07-12-2022	07-11-2023
LISN	Schwarzbeck	NSLK 8127	QCJ001-13	02-24-2022	02-23-2023
LISN	Rohde & Schwarz	ESH3-Z5	WXJ005-1	03-30-2022	03-29-2023
LISN Coaxial Cable (9kHz ~ 30MHz)	JYTSZ	JYTCE-1G-NN-2M	WXG003-1	02-24-2022	02-23-2023
RF Switch	TOP PRECISION	RSU0301	WXG003	N/A	
Test Software	AUDIX	E3	Version: 6.110919b		

4 Measurement Setup and Procedure

4.1 Test Setup

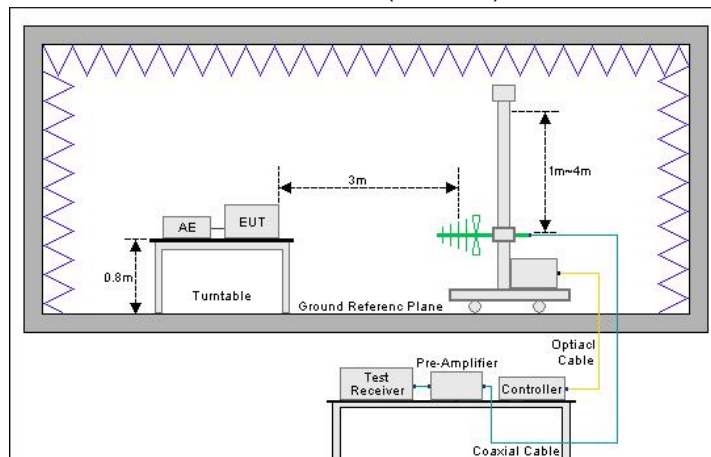
1) Conducted emission measurement:



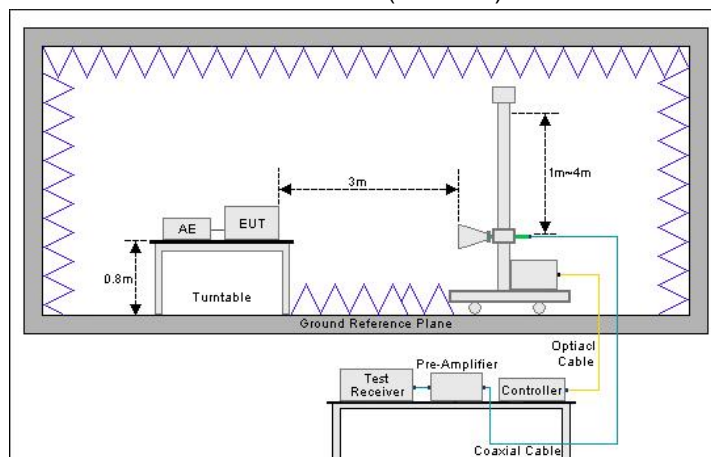
Note: The 0.8 m distance specified between EUT/AE/PSU and AMN/AAN, is applicable only to the EUT being measured. If the device is AE then it shall be >0.8 m.

2) Radiated emission measurement:

Below 1GHz (3m SAC)



Above 1GHz (3m SAC)



4.2 Test Procedure

Test method	Test step
Conducted emission	<ol style="list-style-type: none"> 1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment. 2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). 3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4 on conducted measurement.
Radiated emission	<p>For below 1GHz:</p> <ol style="list-style-type: none"> 1. The EUT was placed on the tabletop of a rotating table 0.8 m the ground at a 3 m semi anechoic chamber. The measurement distance from the EUT to the receiving antenna is 3 m. 2. EUT works in each mode of operation that needs to be tested, and having the EUT continuously working, respectively on 3 axis (X, Y & Z) and considered typical configuration to obtain worst position. The highest signal levels relative to the limit shall be determined by rotating the EUT from 0° to 360° and with varying the measurement antenna height between 1 m and 4 m in vertical and horizontal polarizations. 3. Open the test software to control the test antenna and test turntable. Perform the test, save the test results, and export the test data. <p>For above 1GHz:</p> <ol style="list-style-type: none"> 1. The EUT was placed on the tabletop of a rotating table 0.8 m the ground at a 3 m fully anechoic room. The measurement distance from the EUT to the receiving antenna is 3 m. 2. EUT works in each mode of operation that needs to be tested, and having the EUT continuously working, respectively on 3 axis (X, Y & Z) and considered typical configuration to obtain worst position. The highest signal levels relative to the limit shall be determined by rotating the EUT from 0° to 360° and with varying the measurement antenna height between 1 m and 4 m in vertical and horizontal polarizations. 3. Open the test software to control the test antenna and test turntable. Perform the test, save the test results, and export the test data.

5 Test Results

5.1 Summary

5.1.1 Clause and data summary

Test items	Standard clause	Test data	Result
Conducted Emission	Part 15.107	See Section 5.2	Pass
Radiated Emission	Part 15.109	See Section 5.3	Pass
Remark: 1. The EUT is a Class A digital device. 2. Pass: The EUT complies with the essential requirements in the standard. 3. N/A: Not Applicable.			
Test Method:	ANSI C63.4:2014		

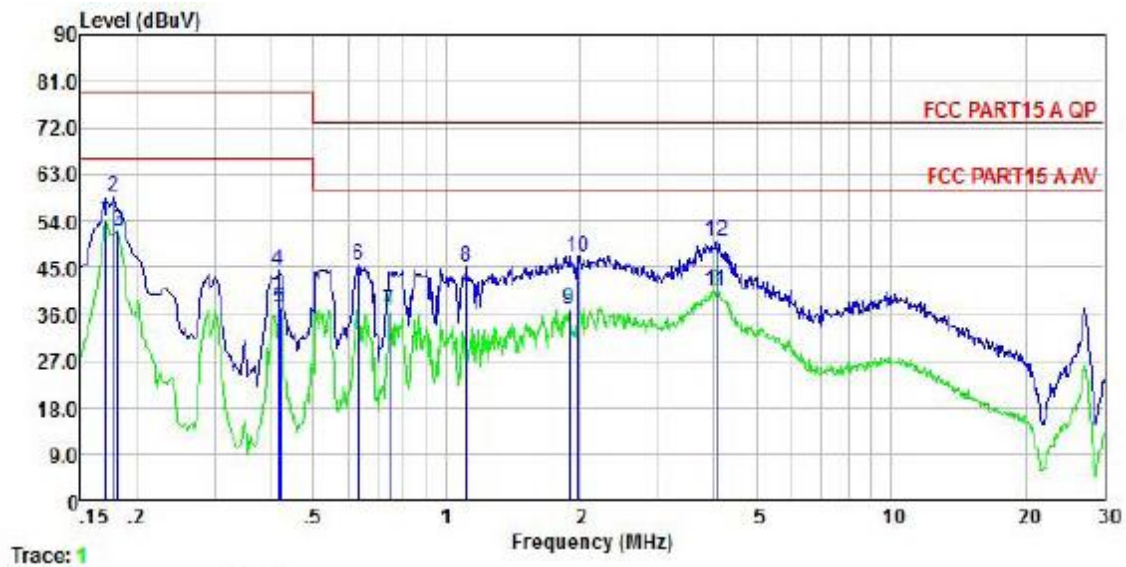
5.1.2 Test Limit

Test items	Limit					
Conducted Emission	Frequency (MHz)	Class A Limit (dB μ V)		Class B Limit (dB μ V)		
		Quasi-Peak	Average	Quasi-Peak	Average	
	0.15 – 0.5	79	66	66 to 56 <small>Note 1</small>	56 to 46 <small>Note 1</small>	
	0.5 – 5	73	60	56	46	
	5 – 30	73	60	60	50	
Note 1: The limit level in dB μ V decreases linearly with the logarithm of frequency. Note 2: The more stringent limit applies at transition frequencies.						
Radiated Emission	Frequency (MHz)	Class A Limit (dB μ V/m)		Class B Limit (dB μ V/m)		
		Quasi-Peak @ 3m	Quasi-Peak @ 10m	Quasi-Peak @ 3m	Quasi-Peak @ 10m	
	30 – 88	49.0	39.0	40.0	30.0	
	88 – 216	53.5	43.5	43.5	33.5	
	216 – 960	56.0	46.0	46.0	36.0	
	960 – 1000	60.0	50.0	54.0	44.0	
	Note: The more stringent limit applies at transition frequencies.					
	Frequency	Class A Limit (dB μ V/m) @ 3m		Class B Limit (dB μ V/m) @ 3m		
		Average	Peake	Average	Peake	
	Above 1 GHz	60.0	80.0	54.0	74.0	
Note: The measurement bandwidth shall be 1 MHz or greater.						

5.2 Conducted Emission

Adapter 1:

Product name:	Autel Tracker	Product model:	DFAT-1
Test by:	Mike	Test mode:	Charging mode
Test frequency:	150 kHz ~ 30 MHz	Phase:	Line
Test voltage:	AC 120 V/60 Hz		

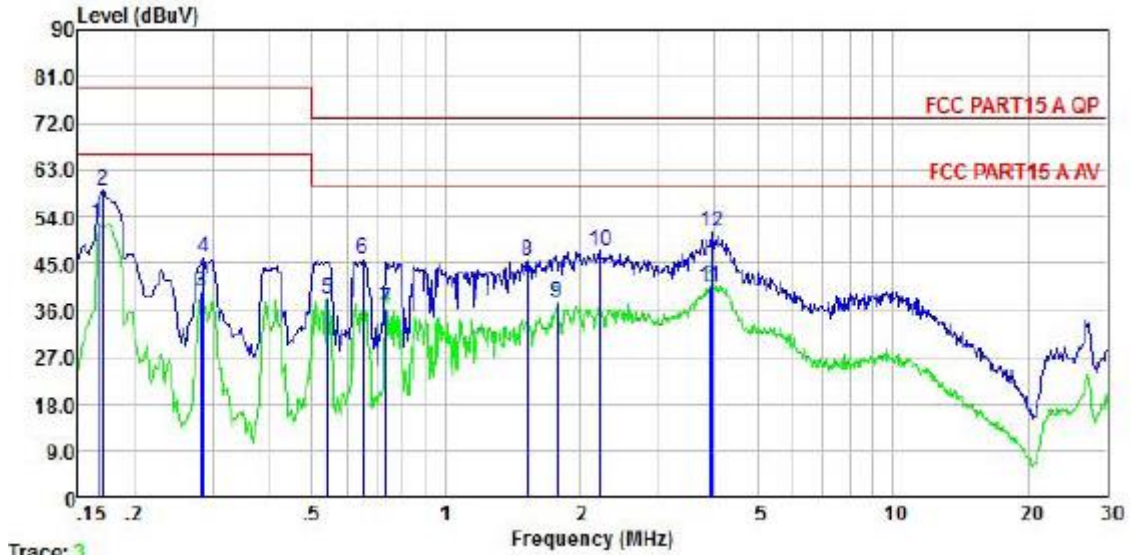


	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.170	54.21	0.04	0.01	54.26	66.00	-11.74	Average
2	0.178	58.64	0.05	0.01	58.70	79.00	-20.30	QP
3	0.182	51.99	0.05	0.01	52.05	66.00	-13.95	Average
4	0.417	44.58	0.05	0.04	44.67	79.00	-34.33	QP
5	0.421	37.01	0.05	0.04	37.10	66.00	-28.90	Average
6	0.634	45.32	0.06	0.02	45.40	73.00	-27.60	QP
7	0.743	36.55	0.07	0.03	36.65	60.00	-23.35	Average
8	1.106	45.04	0.07	0.07	45.18	73.00	-27.82	QP
9	1.888	36.60	0.08	0.20	36.88	60.00	-23.12	Average
10	1.980	47.00	0.08	0.21	47.29	73.00	-25.71	QP
11	4.049	40.37	0.11	0.08	40.56	60.00	-19.44	Average
12	4.049	50.03	0.11	0.08	50.22	73.00	-22.78	QP

Remark:

1. Level = Read level + LISN Factor + Cable Loss.

Product name:	Autel Tracker	Product model:	DFAT-1
Test by:	Mike	Test mode:	Charging mode
Test frequency:	150 kHz ~ 30 MHz	Phase:	Neutral
Test voltage:	AC 120 V/60 Hz		



Trace: 3

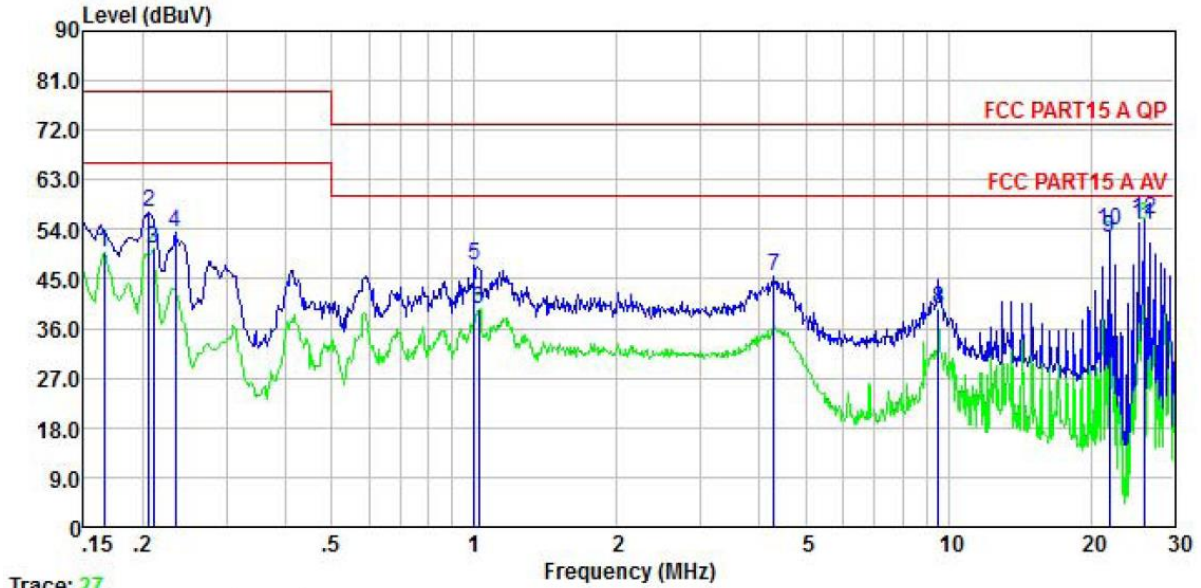
	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.166	52.84	0.06	0.01	52.91	66.00	-13.09	Average
2	0.170	58.92	0.06	0.01	58.99	79.00	-20.01	QP
3	0.282	39.56	0.05	0.02	39.63	66.00	-26.37	Average
4	0.286	46.18	0.05	0.03	46.26	79.00	-32.74	QP
5	0.541	38.05	0.04	0.03	38.12	60.00	-21.88	Average
6	0.651	45.82	0.06	0.03	45.91	73.00	-27.09	QP
7	0.731	36.23	0.06	0.03	36.32	60.00	-23.68	Average
8	1.527	45.37	0.07	0.15	45.59	73.00	-27.41	QP
9	1.772	37.12	0.07	0.18	37.37	60.00	-22.63	Average
10	2.213	47.15	0.08	0.17	47.40	73.00	-25.60	QP
11	3.901	40.47	0.10	0.08	40.65	60.00	-19.35	Average
12	3.964	50.82	0.10	0.08	51.00	73.00	-22.00	QP

Remark:

1. Level = Read level + LISN Factor + Cable Loss.

Adapter 2:

Product name:	Autel Tracker	Product model:	DFAT-1
Test by:	Mike	Test mode:	Power on & Working mode
Test frequency:	150 kHz ~ 30 MHz	Phase:	Line
Test voltage:	AC 120 V/60 Hz		



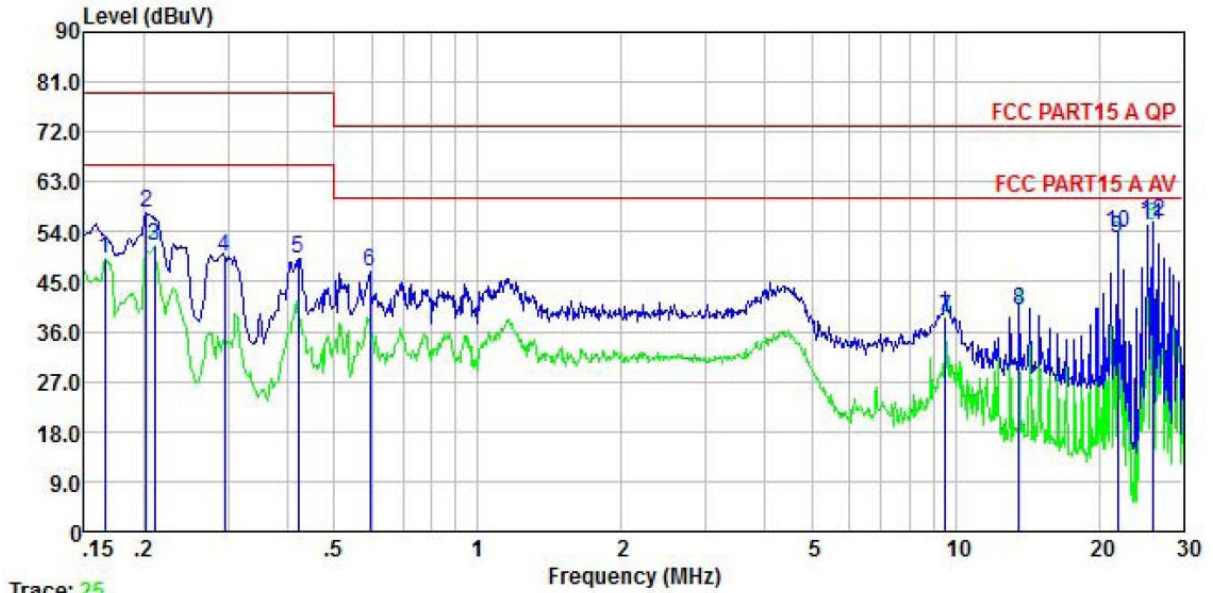
Trace: 27

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.166	39.13	0.04	0.01	49.68	66.00	-16.32	Average
2	0.206	46.50	0.05	0.04	57.09	79.00	-21.91	QP
3	0.211	39.90	0.05	0.03	50.48	66.00	-15.52	Average
4	0.234	43.05	0.05	0.02	53.62	79.00	-25.38	QP
5	1.000	36.95	0.07	0.05	47.57	73.00	-25.43	QP
6	1.021	28.99	0.07	0.05	39.61	60.00	-20.39	Average
7	4.292	34.69	0.11	0.08	45.38	73.00	-27.62	QP
8	9.552	28.53	0.21	0.12	39.36	60.00	-20.64	Average
9	21.830	41.44	0.36	0.16	52.46	60.00	-7.54	Average
10	21.830	42.71	0.36	0.16	53.73	73.00	-19.27	QP
11	25.864	43.81	0.38	0.21	54.90	60.00	-5.10	Average
12	25.864	44.84	0.38	0.21	55.93	73.00	-17.07	QP

Remark:

1. Level = Read level + LISN Factor + Cable Loss.

Product name:	Autel Tracker	Product model:	DFAT-1
Test by:	Mike	Test mode:	Power on & Working mode
Test frequency:	150 kHz ~ 30 MHz	Phase:	Neutral
Test voltage:	AC 120 V/60 Hz		



Trace: 25

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.166	38.42	0.06	0.01	48.99	66.00	-17.01	Average
2	0.202	46.73	0.05	0.04	57.32	79.00	-21.68	QP
3	0.211	40.80	0.05	0.03	51.38	66.00	-14.62	Average
4	0.296	39.06	0.05	0.03	49.64	79.00	-29.36	QP
5	0.421	38.61	0.04	0.04	49.19	79.00	-29.81	QP
6	0.595	36.22	0.05	0.02	46.79	73.00	-26.21	QP
7	9.552	27.72	0.20	0.12	38.54	60.00	-21.46	Average
8	13.623	28.89	0.26	0.12	39.77	60.00	-20.23	Average
9	21.830	41.81	0.36	0.16	52.83	60.00	-7.17	Average
10	21.830	42.75	0.36	0.16	53.77	73.00	-19.23	QP
11	25.864	43.96	0.41	0.21	55.08	60.00	-4.92	Average
12	25.864	44.80	0.41	0.21	55.92	73.00	-17.08	QP

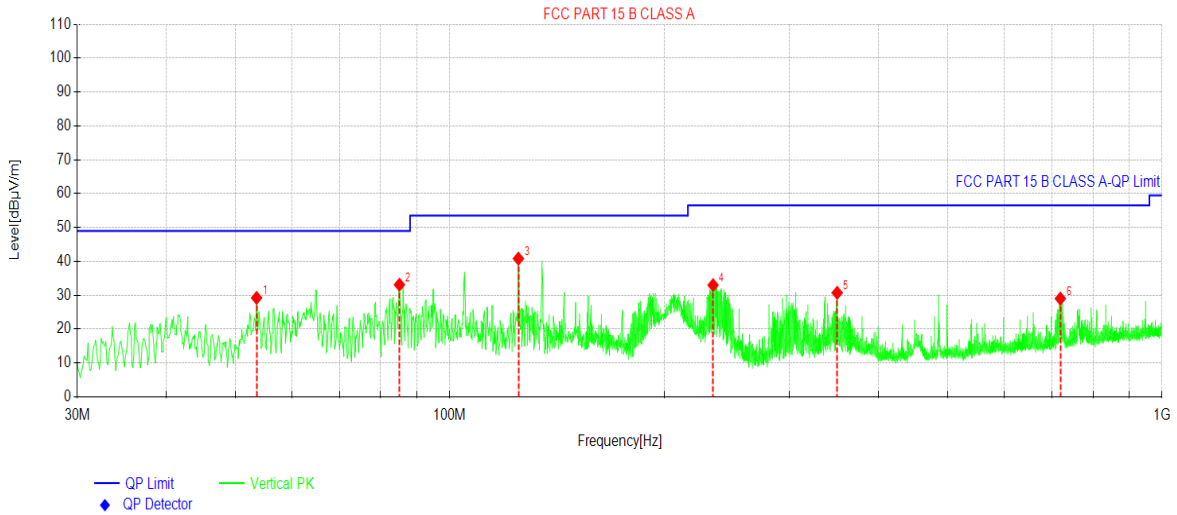
Remark:

1. Level = Read level + LISN Factor + Cable Loss.

5.3 Radiated Emission

Adapter 1:

Product Name:	Autel Tracker	Product Model:	DFAT-1
Test By:	Mike	Test mode:	Charging mode
Test Frequency:	30 MHz ~ 1 GHz	Polarization:	Vertical
Test Voltage:	AC 120V/60Hz		

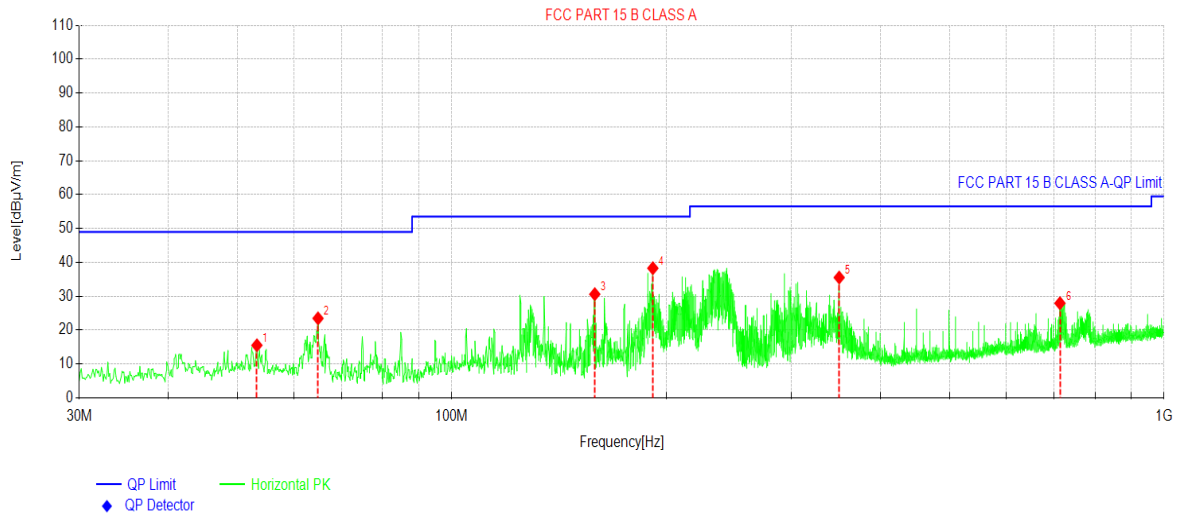


Suspected Data List								
NO.	Freq. [MHz]	Reading[dBµV/m]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Trace	Polarity
1	53.5734	44.65	29.23	-15.42	49.00	19.77	PK	Vertical
2	85.0045	52.81	33.12	-19.69	49.00	15.88	PK	Vertical
3	124.875	60.34	40.82	-19.52	53.50	12.68	PK	Vertical
4	234.302	48.81	33.00	-15.81	56.50	23.50	PK	Vertical
5	349.938	43.79	30.72	-13.07	56.50	25.78	PK	Vertical
6	720.030	36.96	29.02	-7.94	56.50	27.48	PK	Vertical

Remark:

1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).

Product Name:	Autel Tracker	Product Model:	DFAT-1
Test By:	Mike	Test mode:	Charging mode
Test Frequency:	30 MHz ~ 1 GHz	Polarization:	Horizontal
Test Voltage:	AC 120V/60Hz		



Suspected Data List

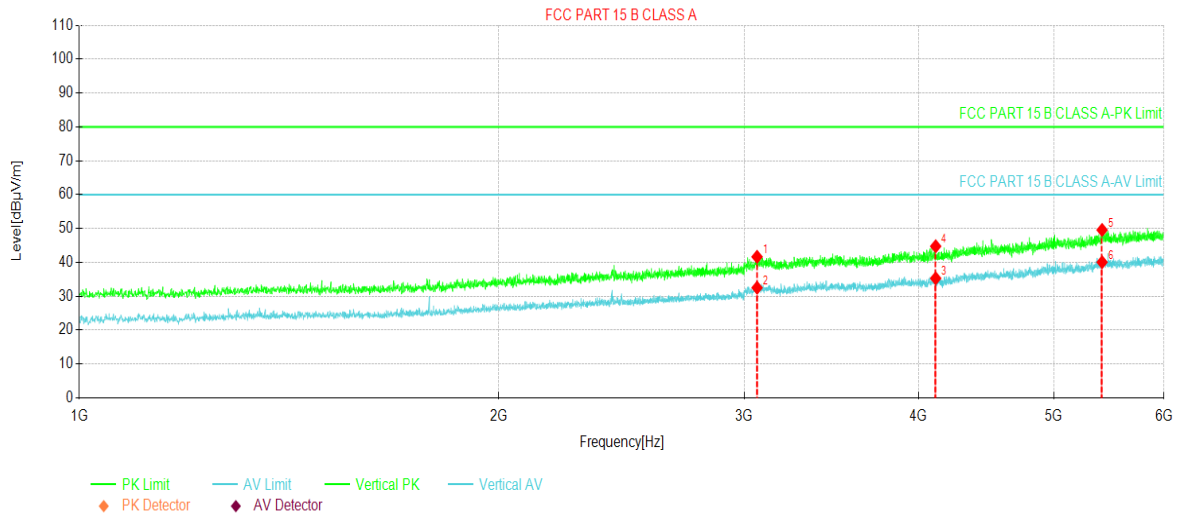
NO.	Freq. [MHz]	Reading[dBµV/m]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Trace	Polarity
1	53.2823	30.93	15.53	-15.40	49.00	33.47	PK	Horizontal
2	64.9235	40.37	23.47	-16.90	49.00	25.53	PK	Horizontal
3	158.828	50.35	30.61	-19.74	53.50	22.89	PK	Horizontal
4	191.618	55.71	38.28	-17.43	53.50	15.22	PK	Horizontal
5	349.938	48.59	35.52	-13.07	56.50	20.98	PK	Horizontal
6	714.403	35.97	27.95	-8.02	56.50	28.55	PK	Horizontal

Remark:

1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).

Above 1GHz:

Product Name:	Autel Tracker	Product Model:	DFAT-1
Test By:	Mike	Test mode:	Charging mode
Test Frequency:	1000 MHz ~ 6000 MHz	Polarization:	Vertical
Test Voltage:	AC 120V/60Hz		

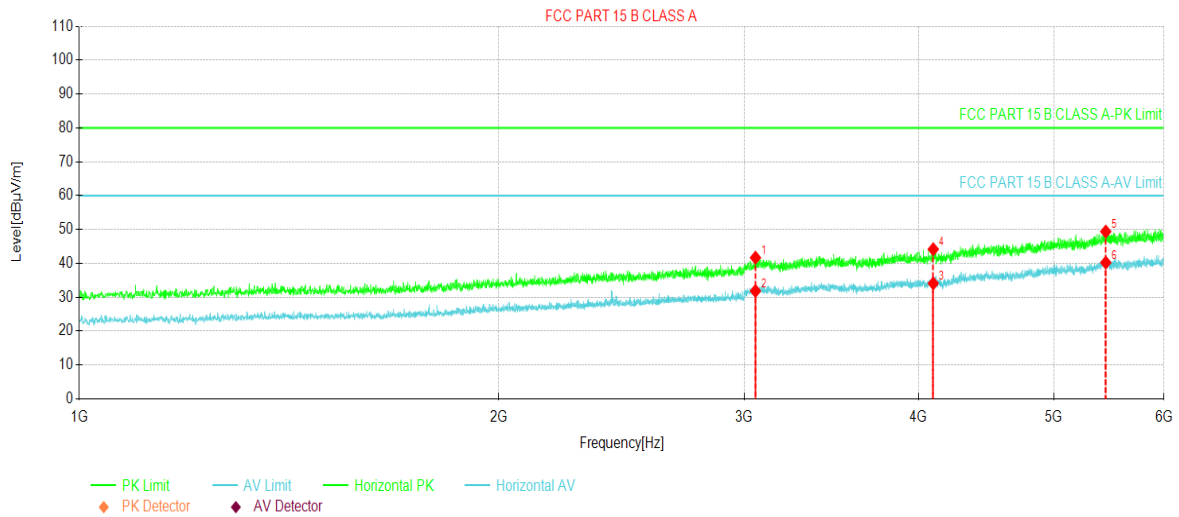


Suspected Data List								
NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Trace	Polarity
1	3063.75	58.26	-16.62	41.64	80.00	38.36	PK	Vertical
2	3063.75	49.14	-16.62	32.52	60.00	27.48	AV	Vertical
3	4115.00	48.05	-12.75	35.30	60.00	24.70	AV	Vertical
4	4115.00	57.50	-12.75	44.75	80.00	35.25	PK	Vertical
5	5416.87	56.18	-6.62	49.56	80.00	30.44	PK	Vertical
6	5416.87	46.68	-6.62	40.06	60.00	19.94	AV	Vertical

Remark:

- Level = Reading + Factor(Antenna Factor + Cable Loss – Pre-amplifier Factor).
- Test Frequency up to 40GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.

Product Name:	Autel Tracker	Product Model:	DFAT-1
Test By:	Mike	Test mode:	Charging mode
Test Frequency:	1000 MHz ~ 6000 MHz	Polarization:	Horizontal
Test Voltage:	AC 120V/60Hz		



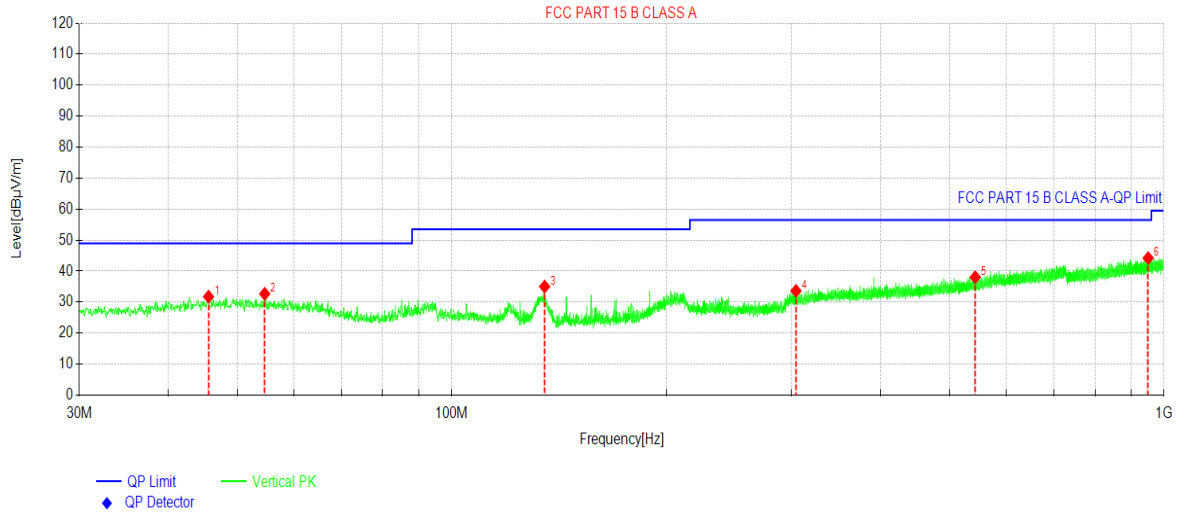
Suspected Data List								
NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Trace	Polarity
1	3055.62	58.38	-16.71	41.67	80.00	38.33	PK	Horizontal
2	3055.62	48.56	-16.71	31.85	60.00	28.15	AV	Horizontal
3	4098.75	46.92	-12.84	34.08	60.00	25.92	AV	Horizontal
4	4098.75	57.02	-12.84	44.18	80.00	35.82	PK	Horizontal
5	5450.00	56.04	-6.65	49.39	80.00	30.61	PK	Horizontal
6	5450.00	46.87	-6.65	40.22	60.00	19.78	AV	Horizontal

Remark:

- Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- Test Frequency up to 40GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.

Adapter 2:

Product Name:	Autel Tracker	Product Model:	DFAT-1
Test By:	Mike	Test mode:	Power on & Working mode
Test Frequency:	30 MHz ~ 1 GHz	Polarization:	Vertical
Test Voltage:	AC 120V/60Hz		

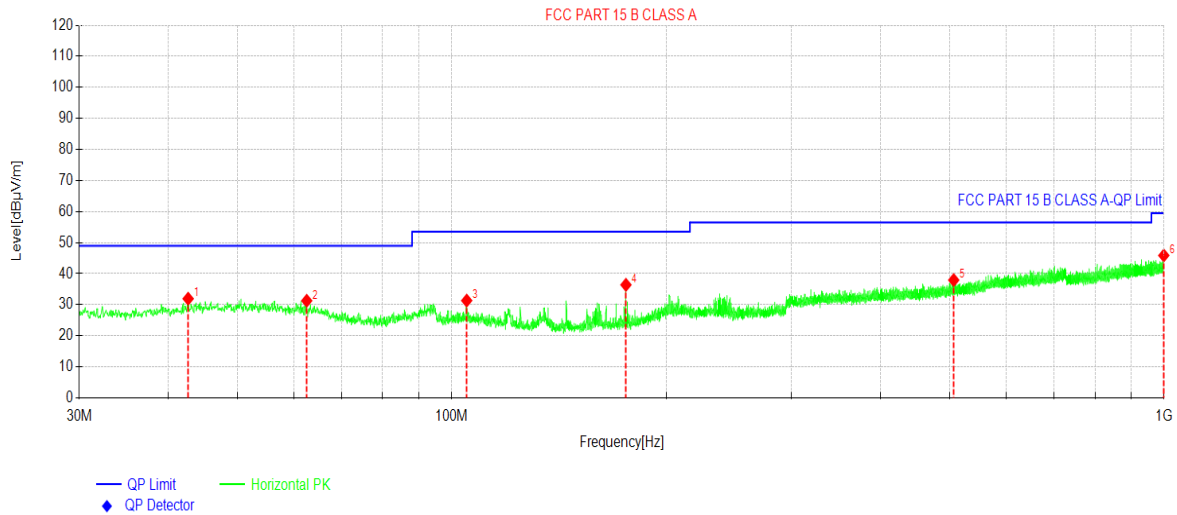


Suspected Data List								
NO.	Freq. [MHz]	Reading[dBµV/m]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Trace	Polarity
1	45.5685	46.94	31.76	-15.18	49.00	17.24	PK	Vertical
2	54.6380	48.15	32.67	-15.48	49.00	16.33	PK	Vertical
3	135.051	55.10	35.02	-20.08	53.50	18.48	PK	Vertical
4	304.316	48.04	33.63	-14.41	56.50	22.87	PK	Vertical
5	543.324	48.88	38.04	-10.84	56.50	18.46	PK	Vertical
6	950.190	48.90	44.22	-4.68	56.50	12.28	PK	Vertical

Remark:

1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).

Product Name:	Autel Tracker	Product Model:	DFAT-1
Test By:	Mike	Test mode:	Power on & Working mode
Test Frequency:	30 MHz ~ 1 GHz	Polarization:	Horizontal
Test Voltage:	AC 120V/60Hz		



Suspected Data List

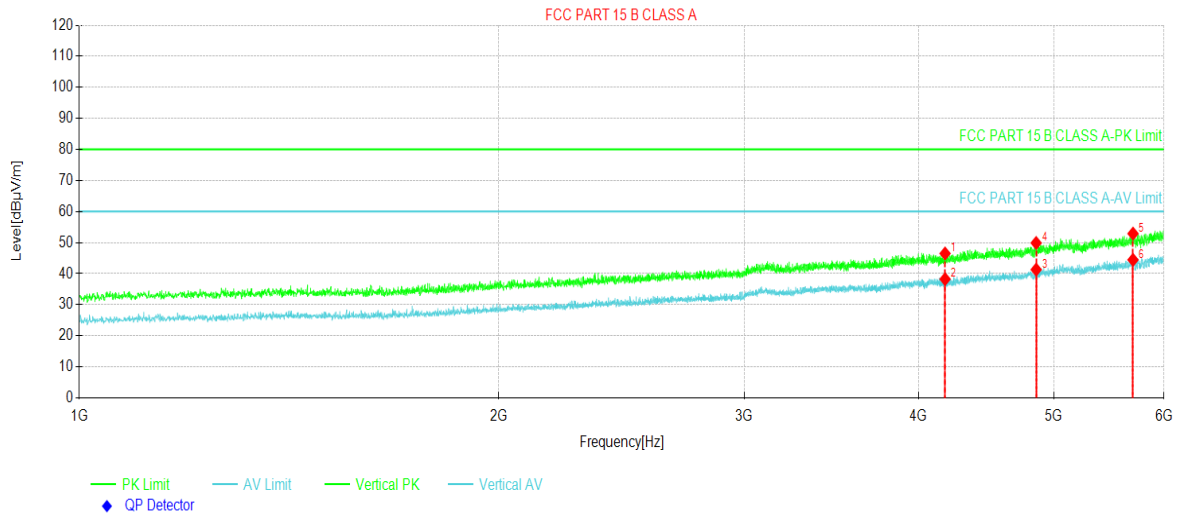
NO.	Freq. [MHz]	Reading[dBµV/m]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Trace	Polarity
1	42.6585	47.54	31.93	-15.61	49.00	17.07	PK	Horizontal
2	62.5920	48.03	31.28	-16.75	49.00	17.72	PK	Horizontal
3	104.981	47.90	31.33	-16.57	53.50	22.17	PK	Horizontal
4	175.645	55.57	36.40	-19.17	53.50	17.10	PK	Horizontal
5	506.803	49.34	37.93	-11.41	56.50	18.57	PK	Horizontal
6	999.369	49.84	45.87	-3.97	59.50	13.63	PK	Horizontal

Remark:

1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).

Above 1GHz:

Product Name:	Autel Tracker	Product Model:	DFAT-1
Test By:	Mike	Test mode:	Power on & Working mode
Test Frequency:	1000 MHz ~ 6000 MHz	Polarization:	Vertical
Test Voltage:	AC 120V/60Hz		

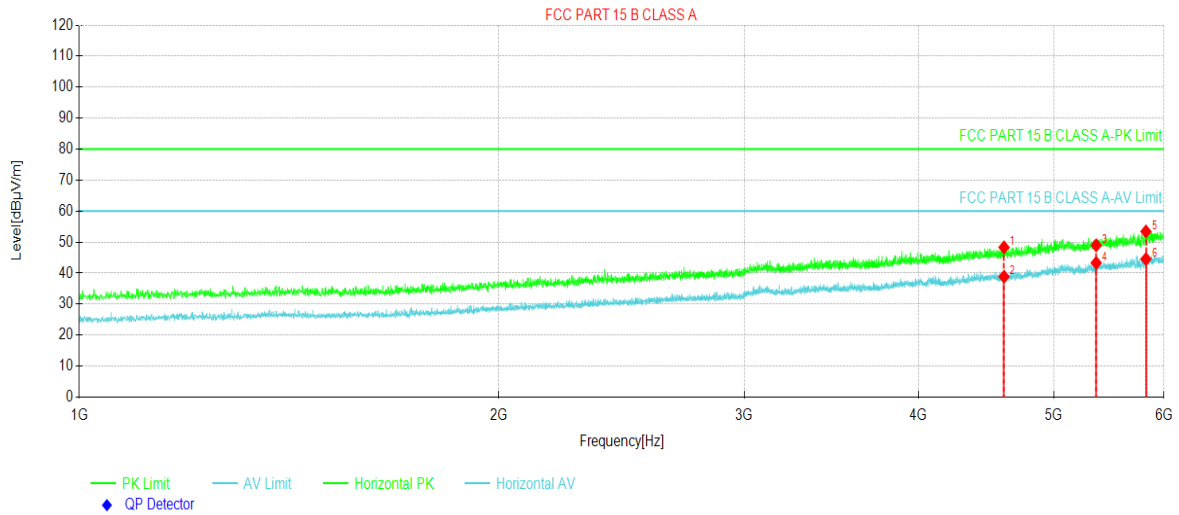


Suspected Data List								
NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Trace	Polarity
1	4179.37	56.89	-10.38	46.51	80.00	33.49	PK	Vertical
2	4179.37	48.62	-10.38	38.24	60.00	21.76	AV	Vertical
3	4858.12	48.47	-7.17	41.30	60.00	18.70	AV	Vertical
4	4858.12	57.05	-7.17	49.88	80.00	30.12	PK	Vertical
5	5700.62	55.91	-3.01	52.90	80.00	27.10	PK	Vertical
6	5700.62	47.47	-3.01	44.46	60.00	15.54	AV	Vertical

Remark:

- Level = Reading + Factor(Antenna Factor + Cable Loss – Pre-amplifier Factor).
- Test Frequency up to 40GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.

Product Name:	Autel Tracker	Product Model:	DFAT-1
Test By:	Mike	Test mode:	Power on & Working mode
Test Frequency:	1000 MHz ~ 6000 MHz	Polarization:	Horizontal
Test Voltage:	AC 120V/60Hz		



Suspected Data List								
NO.	Freq. [MHz]	Reading [dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Trace	Polarity
1	4606.87	56.62	-8.30	48.32	80.00	31.68	PK	Horizontal
2	4606.87	47.14	-8.30	38.84	60.00	21.16	AV	Horizontal
3	5364.37	53.85	-4.87	48.98	80.00	31.02	PK	Horizontal
4	5364.37	48.19	-4.87	43.32	60.00	16.68	AV	Horizontal
5	5823.75	55.84	-2.40	53.44	80.00	26.56	PK	Horizontal
6	5823.75	46.95	-2.40	44.55	60.00	15.45	AV	Horizontal

Remark:

- Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- Test Frequency up to 40GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.

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