FCC&IC TEST REPORT

FCC ID: 2BM33-ACTA

On Behalf of

Jakin Technology Limited

ACTA series

Model No.: See Model List

Prepared for	:	Jakin Technology Limited
Address	:	Unit 913-914, 9/F., Worldwide Industrial Centre, 43-47 Shan Mei Street, Fotan, Shatin, N.T., Hong Kong

Prepared By	:	Shenzhen Alpha Product Testing Co., Ltd.
Address	:	Building i, No.2, Lixin Road, Fuyong Street, Bao'an District, 518103, Shenzhen, Guangdong, China

Report Number	:	A2410081-C01-R08
Date of Receipt	:	December 12, 2024
Date of Test	:	December 12, 2024 – January 14, 2025
Date of Report	:	January 17, 2025
Version Number	:	V0
Test Result	**:**	**Pass**

Contents

1. General Information 5
1.1. Description of Device (EUT) 5
1.2. Accessories of Device (EUT) 6
1.3. Ancillary Equipment Details 6
1.4. Test Lab Information 6
2. Summary of test 7
2.1. Summary of test result 7
2.2. Block Diagram 7
2.3. Test mode 7
2.4. Test Conditions 7
2.5. Measurement Uncertainty (95% confidence levels, k=2) 8
2.6. Test Equipment 9
3. Occupied bandwidth and 20dB Bandwidth 10
3.1. Limit 10
3.2. Test Procedure 10
3.3. Test Setup 10
3.4. Test Result 10
4. Radiated emissions 11
4.1. Limit 11
4.2. Block Diagram of Test setup 11
4.3. Test Procedure 12
4.4. Test Result 13
5. Frequency stability 19
5.1. Test limit 19
5.2. Test Procedure 19
5.3. Test Setup 19
5.4. Test Results 20
6. Power Line Conducted Emissions 21
6.1. Block Diagram of Test Setup 21
6.2. Limit 21
6.3. Test Procedure 21
6.4. Test Result 21
7. Antenna Requirements 24
7.1. Limit 24
7.2. Antenna Connected Construction 24
7.3. Results 24
8. Test setup photo 25
9. Model List 26

TEST REPORT DECLARATION

Applicant	:	Jakin Technology Limited
Address	:	Unit 913-914, 9/F., Worldwide Industrial Centre, 43-47 Shan Mei Street, Fotan, Shatin, N.T., Hong Kong
Manufacturer	:	Jakin Technology Limited
Address	:	Unit 913-914, 9/F., Worldwide Industrial Centre, 43-47 Shan Mei Street, Fotan, Shatin, N.T., Hong Kong
EUT Description	:	ACTA series
	(A) Model No.	: See Model List
	(B) Trademark	: ACTATEK

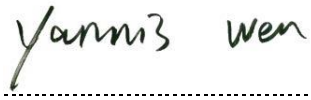
Measurement Standard Used:

FCC Rules and Regulations Part 15 Subpart C Section 15.225

ANSI C63.10:2013

The device described above is tested by Shenzhen Alpha Product Testing Co., Ltd. to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The test results are contained in this test report and Shenzhen Alpha Product Testing Co., Ltd. is assumed full responsibility for the accuracy and completeness of test. Also, this report shows that the EUT is technically compliant with the FCC Part15 requirements.

This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Shenzhen Alpha Product Testing Co., Ltd.

Tested by (name + signature).....:	Yannis Wen Project Engineer	
Approved by (name + signature).....:	Jack Xu Project Manager	
Date of issue..... .....:	January 17, 2025	

Revision History

Revision	Issue Date	Revisions	Revised By
V0	January 17, 2025	Initial released Issue	Yannis Wen

1. General Information

1.1. Description of Device (EUT)

EUT	:	ACTA series
Model No.	:	See Model List
DIFF	:	There is no difference except the name of the model, the Model ID formats starting with AT-XK- and A-XK- use XK to represent the supported number of users from 1000 to 500000 Users. All tests are made with the AT-XK-FA-FST-WI4-P model.
Power supply	:	DC 12V from adapter

NFC		
Operation frequency	:	13.56MHz
Channel No.	:	1 Channel
Modulation	:	ASK
Antenna Type	:	Coil antenna, max gain 0dBi Antenna information is provided by applicant.
Software version	:	V1.0
Hardware Version/ FVIN	:	V1.0
Intend use environment	:	Residential, commercial and light industrial environment

1.2. Accessories of Device (EUT)

Accessories	:	AC ADAPTOR
Manufacturer	:	Ktec®
Model	:	KSAFF1200225W1UV-1
Ratings	:	INPUT: 100-240V ~ 50/60Hz 0.8A OUTPUT: 12V ⎓ 2.25A

1.3. Ancillary Equipment Details

No.	Description	Manufacturer	Model	Serial Number	Certification or SDOC
1.	N/A	N/A	N/A	N/A	N/A

1.4. Test Lab Information

Shenzhen Alpha Product Testing Co., Ltd

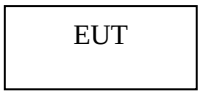
Building i, No.2, Lixin Road, Fuyong Street, Bao'an District, 518103,
Shenzhen, Guangdong, China

2. Summary of test

2.1. Summary of test result

Description of Test Item	Standard	Results
	FCC	
Conducted Emission	15.207	PASS
Radiated emissions	15.209	PASS
Fundamental field strength limit	15.225	PASS
Frequency stability	15.225	PASS
20Db Emission Bandwidth	15.225	PASS
Antenna Requirement	15.203	PASS

2.2. Block Diagram



2.3. Test mode

Tested mode, channel, and data rate information		
Mode	Channel	Frequency (MHz)
1	CH1	13.56
Note: According exploratory test, EUT will have maximum output power in those data rate. so those data rate were used for all test.		

2.4. Test Conditions

Temperature range	21-25℃
Humidity range	40-75%
Pressure range	86-106kPa

2.5. Measurement Uncertainty (95% confidence levels, k=2)

Item	Uncertainty
Uncertainty for Power point Conducted Emissions Test	1.63dB
Uncertainty for Radiation Emission test in 3m chamber (below 30MHz)	3.5dB
Uncertainty for Radiation Emission test in 3m chamber (30MHz to 1GHz)	3.74dB(Polarize: V)
	3.76dB(Polarize: H)
Uncertainty for Radiation Emission test in 3m chamber (1GHz to 25GHz)	3.77dB(Polarize: V)
	3.80dB(Polarize: H)
Uncertainty for Radiation Emission test in 3m chamber (18GHz to 40GHz)	4.31 dB(Polarize: V)
	4.30 dB(Polarize: H)
Uncertainty for radio frequency	5.06×10^{-8}GHz
Uncertainty for conducted RF Power	0.40dB
Uncertainty for temperature	0.2℃
Uncertainty for humidity	1%
Uncertainty for DC and low frequency voltages	0.06%

2.6. Test Equipment

Equipment	Manufacture	Model No.	Firmware version	Serial No.	Last cal.	Cal Interval
9*6*6 anechoic chamber	CHENYU	9*6*6	/	N/A	2022.05.18	3Year
Spectrum analyzer	ROHDE&SCHWARZ	FSV40-N	2.3	102137	2024.08.08	1Year
Spectrum analyzer	Agilent	N9020A	A.14.16	MY499100060	2024.08.08	1Year
Receiver	ROHDE&SCHWARZ	ESR	2.28 SP1	1316.3003K03-102082-Wa	2024.08.08	1Year
Receiver	R&S	ESCI	4.42 SP1	101165	2024.08.08	1Year
Bilog Antenna	Schwarzbeck	VULB 9168	/	VULB 9168#627	2023.08.28	2Year
Horn Antenna	SCHWARZBECK	BBHA 9120 D	/	2106	2023.08.19	2Year
Loop Antenna	SCHWARZBECK	FMZB 1519B	/	00128	2023.08.19	2Year
RF Cable	Resenberger	Cable 1	/	RE1	2024.08.08	1Year
RF Cable	Resenberger	Cable 2	/	RE2	2024.08.08	1Year
RF Cable	Resenberger	Cable 3	/	CE1	2024.08.08	1Year
Pre-amplifier	HP	HP8347A	/	2834A00455	2024.08.08	1Year
Pre-amplifier	Agilent	8449B	/	3008A02664	2024.08.08	1Year
L.I.S.N.#1	Schwarzbeck	NSLK8126	/	8126-466	2024.08.08	1Year
L.I.S.N.#2	ROHDE&SCHWARZ	ENV216	/	101043	2024.08.08	1Year
Horn Antenna	SCHWARZBECK	BBHA 9170	/	00946	2023.08.19	2Year
Preamplifier	SKET	LNPA_1840-50	/	SK2018101801	2024.08.08	1 Year
Power Meter	Agilent	E9300A	/	MY41496628	2024.08.08	1 Year
Power Sensor	DARE	RPR3006W	/	15100041SNO91	2024.08.08	1 Year
Electronic Thermo-Hygrometer	S.H.Qixiang	HTC-1	/	N/A	2024.08.11	1 Year
Switching Mode Power Supply	JUNKE	JK12010S	/	20140927-6	2024.08.08	1 Year
Adjustable attenuator	MWRFtest	N/A	/	N/A	N/A	N/A
10dB Attenuator	Mini-Circuits	DC-6G	/	N/A	N/A	N/A

3. Occupied bandwidth and 20dB Bandwidth

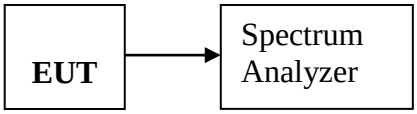
3.1. Limit

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in FCC part 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

3.2. Test Procedure

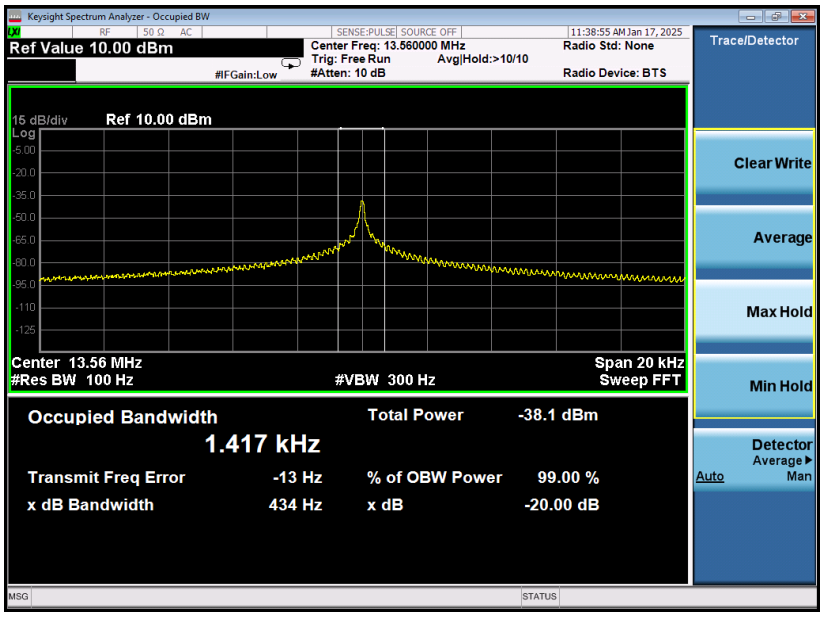
1. The transmitter output was directly connected to a spectrum analyzer with a 50Ω cable. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 3KHz RBW and 10kHz VBW. The 20dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20dB.
2. The test receiver set RBW =1-5%BW, VBW≥3*RBW, Sweep time set auto, detail see the test plot for 99% Bandwidth.

3.3. Test Setup



3.4. Test Result

Mode	Freq (MHz)	20dB Bandwidth (KHz)	99% Bandwidth (KHz)	Limit (kHz)	Conclusion
Tx Mode	13.56	0.434	1.417	/	PASS



4. Radiated emissions

4.1. Limit

Frequency (MHz)	Field Strength		Field Strength Limit at 3m Measurement Dist	
	uV/m	Distance (m)	uV/m	dBuV/m
0.009 ~ 0.490	2400/F(kHz)	300	10000 * 2400/F(kHz)	$20\log^{(2400/F(kHz))} + 80$
0.490 ~ 1.705	24000/F(kHz)	30	100 * 24000/F(kHz)	$20\log^{(24000/F(kHz))} + 40$
1.705 ~ 30	30	30	100 * 30	$20\log^{(30)} + 40$
30 ~ 88	100	3	100	$20\log^{(100)}$
88 ~ 216	150	3	150	$20\log^{(150)}$
216 ~ 960	200	3	200	$20\log^{(200)}$
Above 960	500	3	500	$20\log^{(500)}$

Note:

a) The tighter limit applies at the band edges.
For example: F.S limit at 88MHz is 100uV/m

b) If measurement is made at 3m distance, then F.S Limit at 3m distance is adjusted by using the formula of $L_{d1} = L_{d2} * (d2/d1)^2$.
For example:
F.S Limit at 30m(d2) distance is 30uV/m(L_{d2}), then F.S Limit at 3m(d1) distance is
L_{d1} = 30uV/m * $(30/3)^2$ = 100 * 30uV/m = 69.54 dBuV/m

(a) The field strength of any emissions within the band 13.553-13.567 MHz shall not exceed 15,848 microvolts/meter at 30 meters.

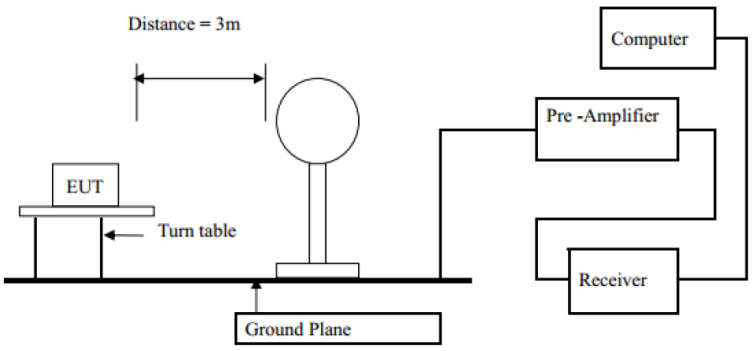
(b) Within the bands 13.410-13.553 MHz and 13.567-13.710 MHz, the field strength of any emissions shall not exceed 334 microvolts/meter at 30 meters.

(c) Within the bands 13.110-13.410 MHz and 13.710-14.010 MHz the field strength of any emissions shall not exceed 106 microvolts/meter at 30 meters.

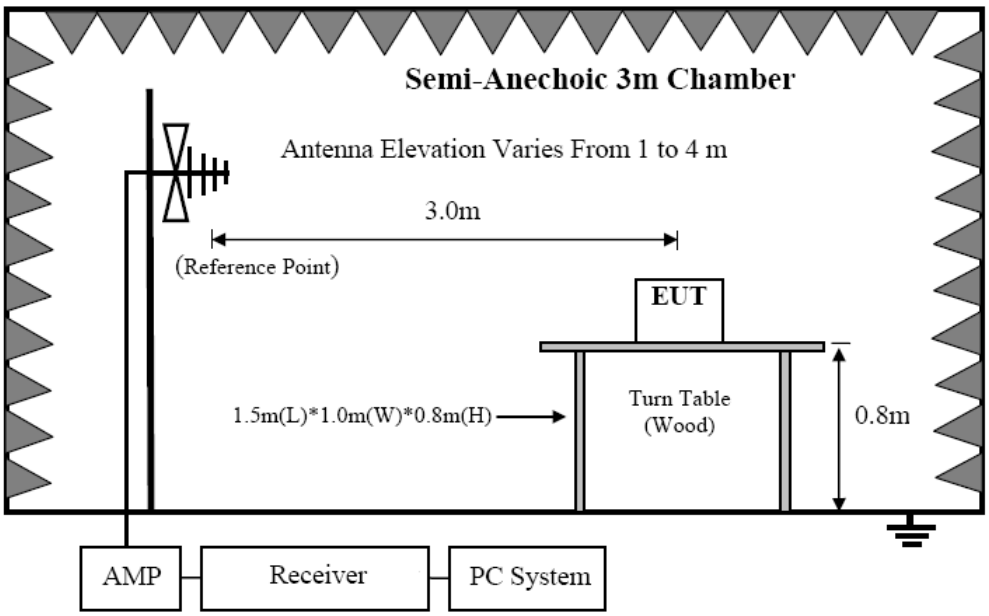
(d) The field strength of any emissions appearing outside of the 13.110-14.010 MHz band shall not exceed the general radiated emission limits in §15.209.

4.2. Block Diagram of Test setup

In 3m Anechoic Chamber Test Setup Diagram for below 30MHz



In 3m Anechoic Chamber Test Setup Diagram for frequency 30MHz-1GHz



4.3. Test Procedure

Procedure of Preliminary Test

The EUT and Support equipment, if needed, were put placed on a non-metallic table, 80cm above the ground plane.

Configuration EUT to simulate typical usage as described in clause 2.4 and test equipment as described in clause 4.2 of this report.

All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10:2013.

Mains cables, telephone lines or other connections to auxiliary equipment located outside the test are shall drape to the floor, be fitted with ferrite clamps or ferrite tubes placed on the floor at the point where the cable reaches the floor and then routed to the place where they leave the turntable. No extension cords shall be used to mains receptacle.

The antenna was placed at 3 meter away from the EUT as stated in ANSI C63.10:2013. The antenna connected to the Spectrum Analyzer via a cable and at times a pre-amplifier would be used.

The Receiver quickly scanned from 9KHz to 30MHz and 30MHz to 1GHz The EUT test program was started. Emissions were scanned and measured rotating the EUT to 360 degrees and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.

The test mode(s) described in clause 2.4 were scanned during the preliminary test:

After the preliminary scan, we found the test mode producing the highest emission level. The EUT and cable configuration, antenna position, polarization and turntable position of the above highest emission level were recorded for the final test.

Procedure of Final Test

EUT and support equipment were set up on the turntable as per the configuration with highest emission level in the preliminary test.

The Receiver scanned from9KHz to 30MHz and 30MHz to 1GHz. Emissions were scanned and measured rotating the EUT to 360 degrees, varying cable placement and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.

Recorded at least the six highest emissions. Emission frequency, amplitude, antenna position, polarization and turntable position were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit and only Q.P. reading is presented.

The test data of the worst-case condition(s) was recorded.

The bandwidth of test receiver is set at 200Hz for 9 KHz to 150 KHz measure, 10 KHz for 150 KHz to 30MHz measure and 120 KHz for 30 MHz to 1GHz measure.

4.4. Test Result

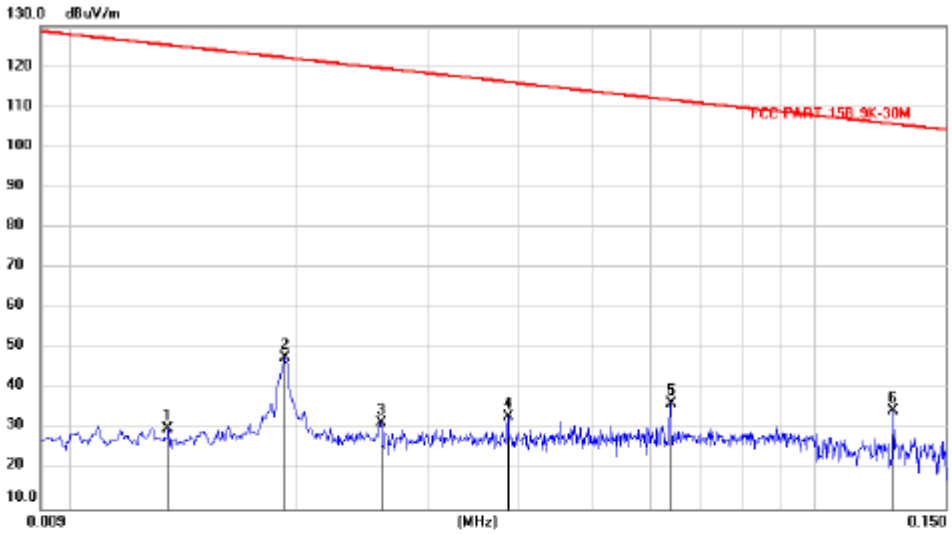
PASS. (See below detailed test result)

Detailed information please see the following page.

From 9KHz to 30MHz: Conclusion: PASS

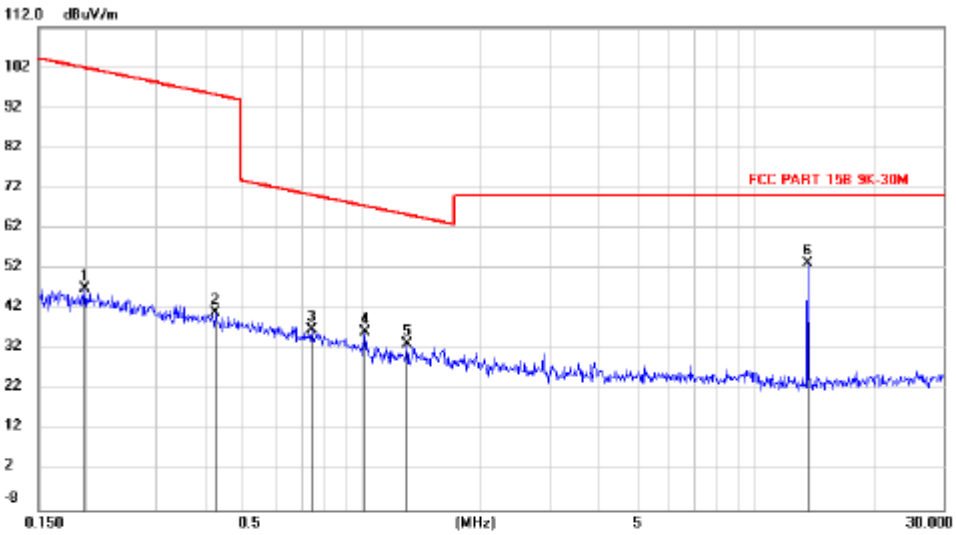
Frequency Range	:	9KHz~30MHz
Test Mode	:	TX: 13.56MHz
Test Results	:	**PASS**
Note:	1. The test results are listed in next pages. 2. This mode is worst case mode, so this report only reflected the worst mode. 3. If the limits for the measurement with the average detector are met when using a receiver with a peak detector, the test unit shall be deemed to meet both limits and the measurement with the quasi-peak detector need not be carried out.	

x



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		0.0134	8.62	21.41	30.03	125.2	-95.22	peak			
2		0.0192	26.51	21.27	47.78	122.1	-74.34	peak			
3		0.0259	10.42	21.10	31.52	119.5	-88.01	peak			
4		0.0384	12.42	20.53	32.95	116.1	-83.16	peak			
5		0.0638	16.29	20.11	36.40	111.7	-75.30	peak			
6	*	0.1276	14.44	19.88	34.32	105.6	-71.36	peak			

Note:1. *:Maximum data; x:Over limit; !:over margin.
2.Measurement=Reading Level+Correct Factor; Correct Factor=Antenna Factor+Cable Loss.

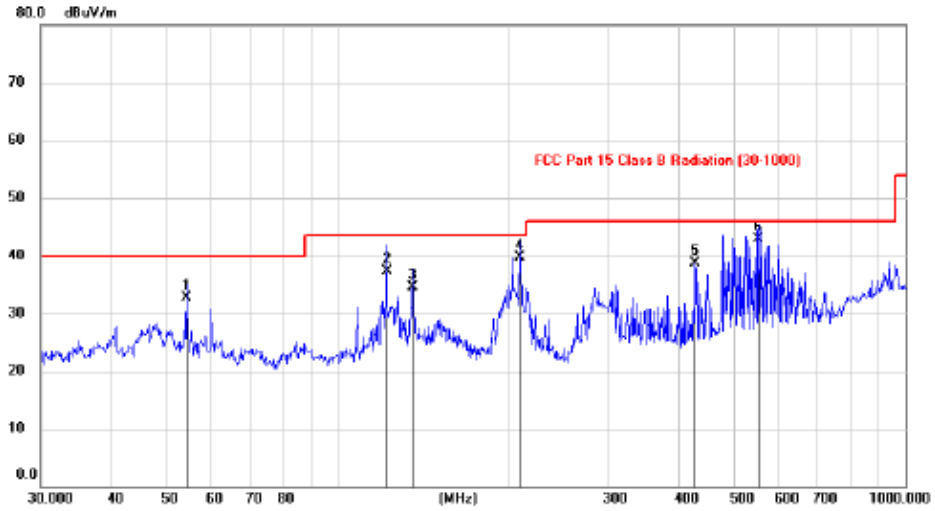


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		0.1971	26.90	20.13	47.03	101.9	-54.88	peak			
2		0.4219	21.38	19.81	41.19	95.30	-54.11	peak			
3		0.7462	17.07	19.85	36.92	70.29	-33.37	peak			
4		1.0141	16.32	20.00	36.32	67.58	-31.26	peak			
5		1.2981	13.06	20.07	33.13	65.41	-32.28	peak			
6	*	13.5652	32.77	20.64	53.41	70.00	-16.59	peak			

Note:1. *:Maximum data; x:Over limit; !:over margin.
2.Measurement=Reading Level+Correct Factor; Correct Factor=Antenna Factor+Cable Loss.

From 30MHz to 1GHz: Conclusion: PASS

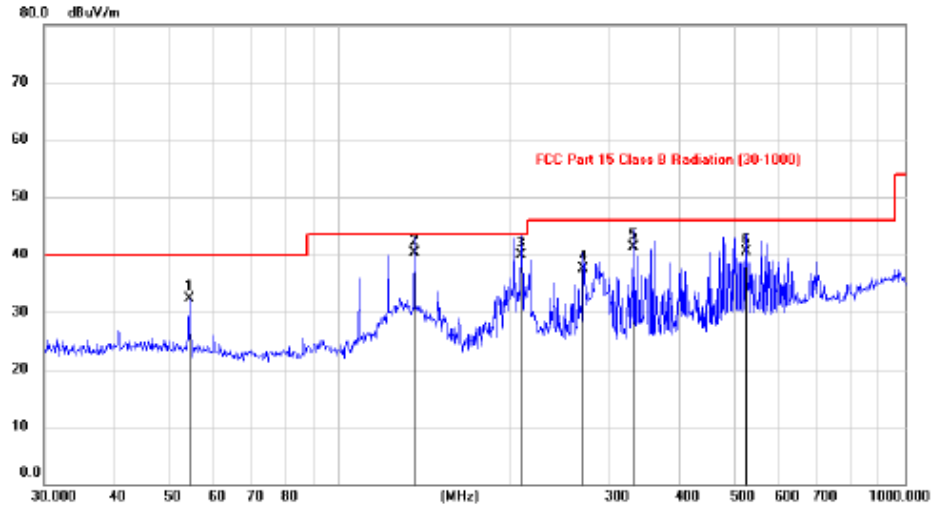
Vertical:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		54.2419	19.10	13.68	32.78	40.00	-7.22	QP			
2		122.0468	24.21	13.15	37.36	43.50	-6.14	QP			
3		135.6168	20.60	13.99	34.59	43.50	-8.91	QP			
4		210.0481	28.61	11.07	39.68	43.50	-3.82	QP			
5		427.9692	21.64	17.01	38.65	46.00	-7.35	peak			
6	*	552.0438	23.68	19.23	42.91	46.00	-3.09	QP			

Note:1. *:Maximum data; x:Over limit; !:over margin.
2.Measurement=Reading Level+Correct Factor; Correct Factor=Antenna Factor+Cable Loss.

Horizontal:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		54.2355	18.60	13.68	32.28	40.00	-7.72	peak			
2	*	135.6168	26.26	13.99	40.25	43.50	-3.25	QP			
3		209.9250	28.76	11.07	39.83	43.50	-3.67	QP			
4		270.0905	24.31	13.29	37.60	46.00	-8.40	QP			
5		332.0138	26.52	14.87	41.39	46.00	-4.61	QP			
6		524.0026	21.81	18.70	40.51	46.00	-5.49	QP			

Note:1. *:Maximum data; x:Over limit; !:over margin.
2.Measurement=Reading Level+Correct Factor; Correct Factor=Antenna Factor+Cable Loss.

Field Strength Emissions Result

Temperature	24.2°C	**Relative Humidity**	52.8%
Pressure	966hPa	**Distance**	3m
Test Mode	TX		

Freq. (MHz)	Position H/V	Detector Mode (PK/QP)	Reading (dBuV)	Factor (dB)	Actual FS (dBuV/m)	Limits 3m (dBuV/m)	Margin (dBuV/m)
13.560	H	Peak	58.89	-13.94	44.95	124	-79.05
13.560	H	AV	50.04	-13.94	36.10	104	-67.90
13.110	H	Peak	47.27	-13.94	33.33	80.5	-47.17
13.410	H	Peak	48.61	-13.94	34.67	80.5	-45.83
13.553	H	Peak	52.65	-13.94	38.71	90.5	-51.79
13.567	H	Peak	52.11	-13.93	38.18	90.5	-52.32
13.710	H	Peak	51.03	-13.94	37.09	80.5	-43.41
14.010	H	Peak	46.88	-13.93	32.95	80.5	-47.55
Freq. (MHz)	**Position H/V**	**Detector Mode (PK/QP)**	**Reading (dBuV)**	**Factor (dB)**	**Actual FS (dBuV/m)**	**Limits 3m (dBuV/m)**	**Margin (dBuV/m)**
13.560	V	Peak	60.90	-13.94	46.96	124	-77.04
13.560	V	AV	48.13	-13.94	34.19	104	-69.81
13.110	V	Peak	49.00	-13.94	35.06	80.5	-45.44
13.410	V	Peak	49.82	-13.94	35.88	80.5	-44.62
13.553	V	Peak	52.24	-13.94	38.30	90.5	-52.20
13.567	V	Peak	52.77	-13.93	38.84	90.5	-51.66
13.710	V	Peak	50.91	-13.94	36.97	80.5	-43.53
14.010	V	Peak	44.82	-13.93	30.89	80.5	-49.61

Note:

1: 30m to 3m correction factor calculation:
40*Log(30m/3m)=40

2: --Means other frequency and mode comply with standard requirements and at least have 20dB margin.

3: Correct Factor=Cable Loss+ Antenna Factor- Amplifier Gain
Measurement Result=Reading + Correct Factor
Margin=Measurement Result-Limit

5. Frequency stability

5.1. Test limit

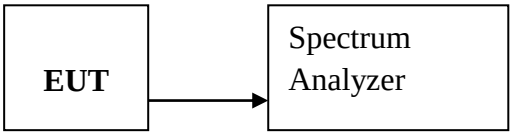
Please refer section RSS 210 B.6 & 15.225e.

Regulation 15.225(e) The frequency tolerance of the carrier signal shall be maintained within +/-0.01%(±100 ppm) of the operating frequency over a temperature variation of –20 degrees to +50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.

5.2. Test Procedure

The following equipment are installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

5.3. Test Setup



5.4. Test Results

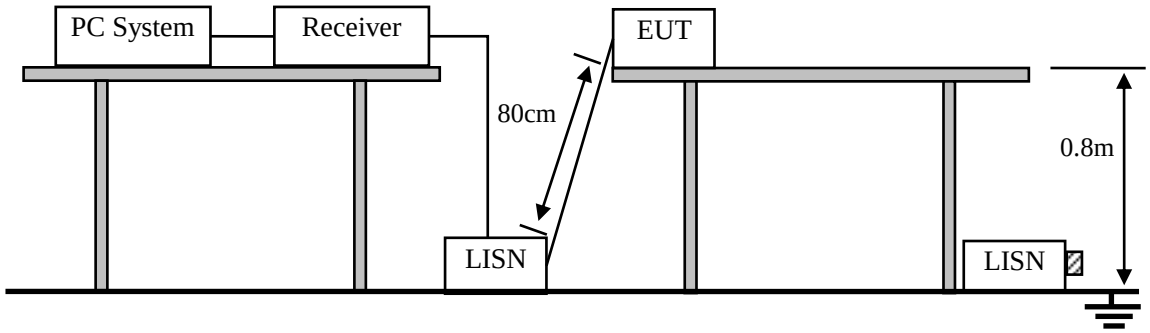
PASS.

Detailed information please see the following page.

Assigned Frequency(MHz): 13.56MHz				
Voltage	Temperature	Measured Frequency (MHz)	Frequency stability	Limit
Low DC 10.8V	+20℃	13.560782	0.000782	±100 ppm ±0.001356MHz
Normal DC 12V	-10℃	13.558717	-0.001283	
	-5℃	13.560469	0.000469	
	0℃	13.560122	0.000122	
	+10℃	13.560028	0.000028	
	+20℃	13.560980	0.000980	
	+30℃	13.560154	0.000154	
	+40℃	13.559161	-0.000839	
	+50℃	13.559429	-0.000571	
	+60℃	13.560151	0.000151	
High DC 13.2V	+20℃	13.560605	0.000605	

6. Power Line Conducted Emissions

6.1. Block Diagram of Test Setup



:50Ω Terminator

6.2. Limit

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level dB(μV)	Average Level dB(μV)
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MHz	60	50

Notes: 1. * Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.

6.3. Test Procedure

(1) The EUT was placed on a non-metallic table, 80cm above the ground plane.

(2) Setup the EUT and simulator as shown in 10.1

(3) The EUT Power connected to the power mains through a power adapter and a line impedance stabilization network (L.I.S.N1). The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N1), this provided a 50-ohm coupling impedance for the EUT (Please refer to the block diagram of the test setup and photographs). Both sides of power line were checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C64.10:2013 on conducted Emission test.

(4) The bandwidth of test receiver is set at 10KHz.

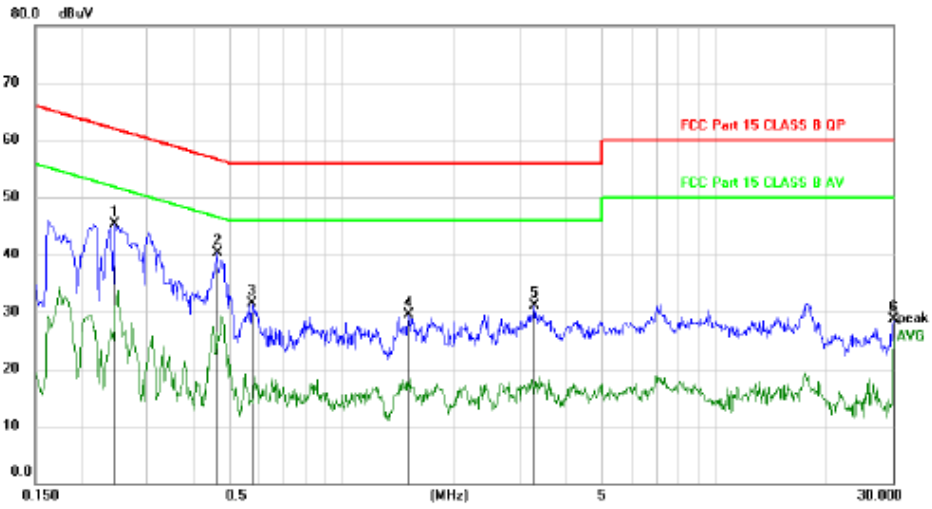
(5) The frequency range from 150 KHz to 30MHz is checked.

6.4. Test Result

PASS. (See below detailed test data)

Note: If peak Result comply with AV limit, QP and AV Result is deemed to comply with AV limit

Line:

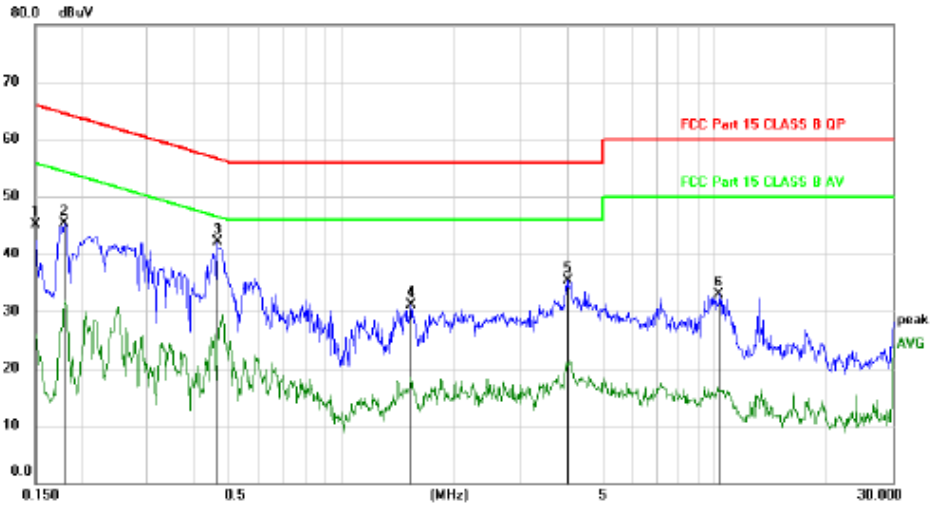


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.2459	35.38	9.97	45.35	61.89	-16.54	peak	
2	*	0.4620	30.33	9.95	40.28	56.66	-16.38	peak	
3		0.5729	21.61	9.93	31.54	56.00	-24.46	peak	
4		1.5059	19.53	9.90	29.43	56.00	-26.57	peak	
5		3.2820	21.13	9.95	31.08	56.00	-24.92	peak	
6		30.0000	17.96	10.67	28.63	60.00	-31.37	peak	

*:Maximum data x:Over limit !:over margin (Reference Only

Note: Measurement=Reading Level+Correc Factor. Factor=(LISN or ISN or PLC or Current Probe)Factor+Cable

Neutral:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	35.19	9.94	45.13	66.00	-20.87	peak	
2		0.1800	35.36	9.93	45.29	64.49	-19.20	peak	
3	*	0.4620	32.06	9.95	42.01	56.66	-14.65	peak	
4		1.5300	21.22	9.90	31.12	56.00	-24.88	peak	
5		4.0080	25.38	9.97	35.35	56.00	-20.65	peak	
6		10.2479	22.78	10.22	33.00	60.00	-27.00	peak	

*:Maximum data x:Over limit !:over margin (Reference Only

Note: Measurement=Reading Level+Correc Factor. Factor=(LISN or ISN or PLC or Current Probe)Factor+Cable

7. Antenna Requirements

7.1. Limit

For intentional device, according to RSS-Gen Section 6.8 and FCC 47 CFR Section 15.203, 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. And according to FCC 47 CFR Section 15.209, if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

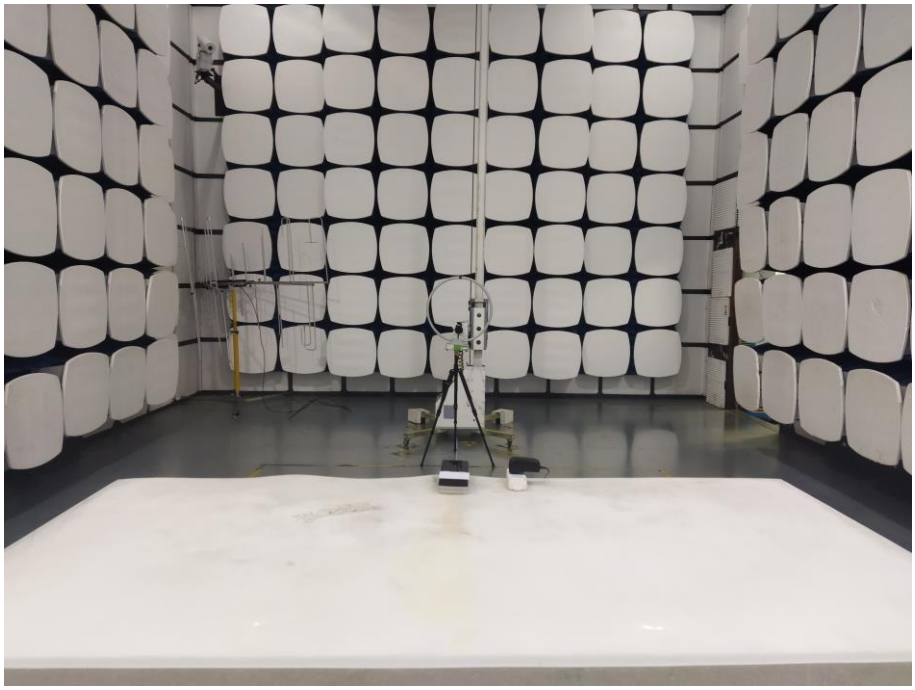
7.2. Antenna Connected Construction

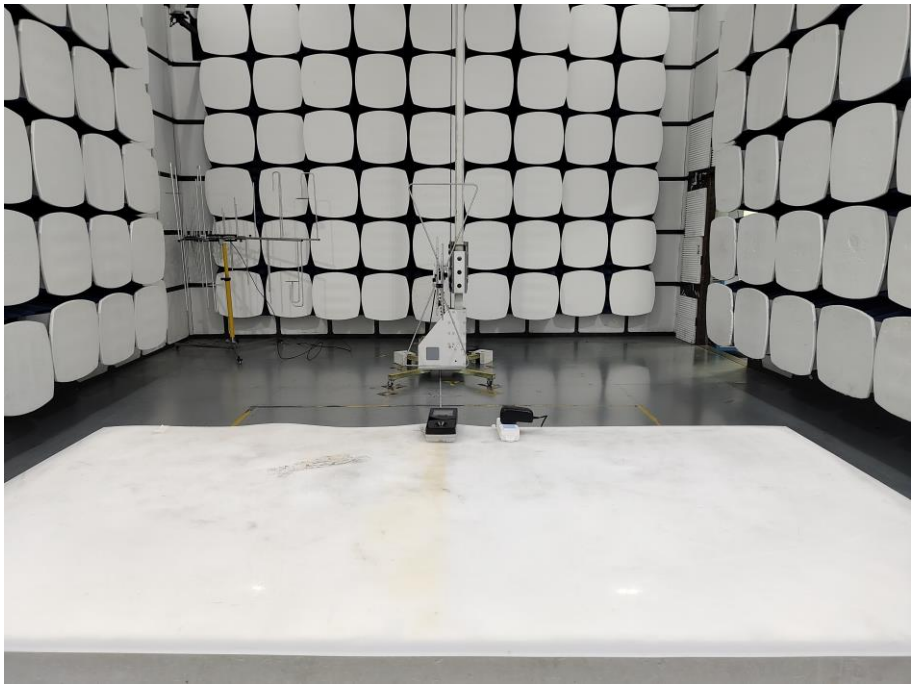
The antenna is internal antenna and no consideration of replacement. Please see EUT photo for details.

7.3. Results

The EUT antenna is Internal Antenna. It complies with the standard requirement.

8. Test setup photo





9. Model List

Model List				
A-XK-FLI	A-XK-FLI-C	A-XK-FLI-P	A-XK-FLI-C-P	A-XK-FLI-C-WI4-P
A-XK-FST	A-XK-FST-C	A-XK-FST-P	A-XK-FST-C-P	A-XK-FST-C-WI4-P
A-XK-FSM	A-XK-FSM-C	A-XK-FSM-P	A-XK-FSM-C-P	A-XK-FSM-C-WI4-P
A-XK-FSE	A-XK-FSE-C	A-XK-FSE-P	A-XK-FSE-C-P	A-XK-FSE-C-WI4-P
A-XK-FHp	A-XK-FHp-C	A-XK-FHp-P	A-XK-FHp-C-P	A-XK-FHp-C-WI4-P
A-XK-FSY	A-XK-FSY-C	A-XK-FSY-P	A-XK-FSY-C-P	A-XK-FSY-C-WI4-P
A-XK-FSX	A-XK-FSX-C	A-XK-FSX-P	A-XK-FSX-C-P	A-XK-FSX-C-WI4-P
A-XK-FSV	A-XK-FSV-C	A-XK-FSV-P	A-XK-FSV-C-P	A-XK-FSV-C-WI4-P
A-XK-FSU	A-XK-FSU-C	A-XK-FSU-P	A-XK-FSU-C-P	A-XK-FSU-C-WI4-P
A-XK-P	A-XK-P-C	A-XK-P-P	A-XK-P-C-P	A-XK-P-C-WI4-P
A-XK-ST	A-XK-ST-C	A-XK-ST-P	A-XK-ST-C-P	A-XK-ST-C-WI4-P
A-XK-SM	A-XK-SM-C	A-XK-SM-P	A-XK-SM-C-P	A-XK-SM-C-WI4-P
A-XK-SE	A-XK-SE-C	A-XK-SE-P	A-XK-SE-C-P	A-XK-SE-C-WI4-P
A-XK-Hp	A-XK-Hp-C	A-XK-Hp-P	A-XK-Hp-C-P	A-XK-Hp-C-WI4-P
A-XK-SY	A-XK-SY-C	A-XK-SY-P	A-XK-SY-C-P	A-XK-SY-C-WI4-P
A-XK-BC	A-XK-BC-C	A-XK-BC-P	A-XK-BC-C-P	A-XK-BC-C-WI4-P
A-XK-SIR	A-XK-SIR-C	A-XK-SIR-P	A-XK-SIR-C-P	A-XK-SIR-C-WI4-P
A-XK-SX	A-XK-SX-C	A-XK-SX-P	A-XK-SX-C-P	A-XK-SX-C-WI4-P
A-XK-SV	A-XK-SV-C	A-XK-SV-P	A-XK-SV-C-P	A-XK-SV-C-WI4-P
A-XK-SU	A-XK-SU-C	A-XK-SU-P	A-XK-SU-C-P	A-XK-SU-C-WI4-P
A-XK-FA	A-XK-FA-P	A-XK-FA-WI4-P	A-XK-FA-FSY	A-XK-FA-FSY-WI4-P
A-XK-FA-FLI	A-XK-FA-FLI-P	A-XK-FA-FLI-WI4-P	A-XK-FA-FSX	A-XK-FA-FSX-WI4-P
A-XK-FA-FST	A-XK-FA-FST-P	A-XK-FA-FST-WI4-P	A-XK-FA-FSV	A-XK-FA-FSV-WI4-P
A-XK-FA-FSM	A-XK-FA-FSM-P	A-XK-FA-FSM-WI4-P	A-XK-FA-FSU	A-XK-FA-FSU-WI4-P
A-XK-FA-FSE	A-XK-FA-FSE-P	A-XK-FA-FSE-WI4-P	A-XK-FA-FSY-P	A-XK-FA-FSV-P
A-XK-FA-FHp	A-XK-FA-FHp-P	A-XK-FA-FHp-WI4-P	A-XK-FA-FSX-P	A-XK-FA-FSU-P
AT-XK-FLI	AT-XK-FLI-C	AT-XK-FLI-P	AT-XK-FLI-C-P	AT-XK-FLI-C-WI4-P
AT-XK-FST	AT-XK-FST-C	AT-XK-FST-P	AT-XK-FST-C-P	AT-XK-FST-C-WI4-P
AT-XK-FSM	AT-XK-FSM-C	AT-XK-FSM-P	AT-XK-FSM-C-P	AT-XK-FSM-C-WI4-P
AT-XK-FSE	AT-XK-FSE-C	AT-XK-FSE-P	AT-XK-FSE-C-P	AT-XK-FSE-C-WI4-P
AT-XK-FHp	AT-XK-FHp-C	AT-XK-FHp-P	AT-XK-FHp-C-P	AT-XK-FHp-C-WI4-P
AT-XK-FSY	AT-XK-FSY-C	AT-XK-FSY-P	AT-XK-FSY-C-P	AT-XK-FSY-C-WI4-P
AT-XK-FSX	AT-XK-FSX-C	AT-XK-FSX-P	AT-XK-FSX-C-P	AT-XK-FSX-C-WI4-P
AT-XK-FSV	AT-XK-FSV-C	AT-XK-FSV-P	AT-XK-FSV-C-P	AT-XK-FSV-C-WI4-P
AT-XK-FSU	AT-XK-FSU-C	AT-XK-FSU-P	AT-XK-FSU-C-P	AT-XK-FSU-C-WI4-P
AT-XK-FA-FLI	AT-XK-FA-FLI-P	AT-XK-FA-FLI-WI4-P	AT-XK-ST	AT-XK-ST-C
AT-XK-FA-FST	AT-XK-FA-FST-P	AT-XK-FA-FST-WI4-P	AT-XK-SM	AT-XK-SM-C
AT-XK-FA-FSM	AT-XK-FA-FSM-P	AT-XK-FA-FSM-WI4-P	AT-XK-SE	AT-XK-SE-C
AT-XK-FA-FSE	AT-XK-FA-FSE-P	AT-XK-FA-FSE-WI4-P	AT-XK-Hp	AT-XK-Hp-C

AT-XK-FA-FHp	AT-XK-FA-FHp-P	AT-XK-FA-FHp-WI4-P	AT-XK-SY	AT-XK-SY-C
AT-XK-FA-FSY	AT-XK-FA-FSY-P	AT-XK-FA-FSY-WI4-P	AT-XK-BC	AT-XK-BC-C
AT-XK-FA-FSX	AT-XK-FA-FSX-P	AT-XK-FA-FSX-WI4-P	AT-XK-SIR	AT-XK-SIR-C
AT-XK-FA-FSV	AT-XK-FA-FSV-P	AT-XK-FA-FSV-WI4-P	AT-XK-SX	AT-XK-SX-C
AT-XK-FA-FSU	AT-XK-FA-FSU-P	AT-XK-FA-FSU-WI4-P	AT-XK-SV	AT-XK-SV-C
AT-XK-SU-C-WI4-P	AT-XK-ST-C-P	AT-XK-ST-C-WI4-P	AT-XK-SU	AT-XK-SU-C
AT-XK-SE-C-WI4-P	AT-XK-Hp-C-WI4-P	AT-XK-SY-C-WI4-P	AT-XK-ST-P	AT-XK-SM-C-P
AT-XK-SX-C-WI4-P	AT-XK-SV-C-WI4-P	AT-XK-SIR-C-P	AT-XK-SM-P	AT-XK-SE-C-P
AT-XK-SE-P	AT-XK-SIR-P	AT-XK-Hp-C-P	AT-XK-SV-C-P	AT-XK-SX-C-P
AT-XK-Hp-P	AT-XK-SX-P	AT-XK-SY-C-P	AT-XK-SU-C-P	AT-XK-BC-C-WI4-P
AT-XK-SY-P	AT-XK-SV-P	AT-XK-BC-C-P	AT-XK-SM-C-WI4-P	AT-XK-SIR-C-WI4-P
AT-XK-BC-P	AT-XK-SU-P			

--------END OF THE REPORT-------