

EMC Test Report

Applicant: AOK Industrial Company Limited

Product: LED Garden Light

Model: AOK-20WiP-NV-L3-00-XX70-BN-P-I;
(Other models refer to Model List)

In accordance with EN IEC 55015, EN IEC 61000-3-2,
EN 61000-3-3 and EN 61547

Prepared for: AOK Industrial Company Limited
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of Xinyu Road, Xiangshan Community, Xianqiao Street Baoan
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CHINA


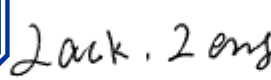


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Report Number: 68.740.18.0532.04UK

RESPONSIBLE FOR	NAME	SIGNATURE	DATE
Approved by	Dawi Xu		2022-08-30
Prepared by	Zack Zeng		2022-08-30

Signatures in this approval box have checked this document in line with the requirements of TÜV SÜD Product Service control rules.

EXECUTIVE SUMMARY

A sample of this product was tested and found to be in compliance with EN IEC 55015:2019/A11:2020, EN IEC 61000-3-2:2019/A1:2021, EN 61000-3-3:2013/A2:2021 and EN 61547:2009.

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1 Report Summary

1.1 Report Modification Record

Alterations and additions to this report will be issued to the holders of each copy in the form of a complete document.

Issue	Description of Change	Date of Issue
1	First Issue	2022-08-30

1.2 Introduction

The information contained in this report is intended to show verification of the EMC Qualification Approval Testing of the requirements of the standards for the tests listed in Section 1.3.

Applicant	AOK Industrial Company Limited
Address	1/F of 1#Building, East Block of 3/F of Building 1, And 2/F of Building 4, ST George's Science and Technology, Industrial Park, Northside of Xinyu Road, Xiangshan Community, Xianqiao Street Baoan District, 518000 Shenzhen, Guangdong, PEOPLE'S REPUBLIC OF CHINA
Manufacturer	Same as applicant
Address	Same as applicant
Factory	Same as applicant
Address	Same as applicant
Model Number(s)	AOK-20WiP-NV-L3-00-XX70-BN-P-I; AOK-25WiP-NV-L3-00-XX70-BN-P-I; AOK-30WiP-NV-L3-00-XX70-BN-P-I; AOK-40WiP-NV-L3-00-XX70-BN-P-I; AOK-50WiP-NV-L3-00-XX70-BN-P-I; AOK-60WiP-NV-L3-00-XX70-BN-P-I; AOK-75WiP-NV-L3-00-XX70-BN-P-I; AOK-120WiP-NV-L3-00-XX70-BN-P-I; AOK-20WiP-NV-L3-00-XX80-BN-P-I; AOK-25WiP-NV-L3-00-XX80-BN-P-I; AOK-30WiP-NV-L3-00-XX80-BN-P-I; AOK-40WiP-NV-L3-00-XX80-BN-P-I; AOK-50WiP-NV-L3-00-XX80-BN-P-I; AOK-60WiP-NV-L3-00-XX80-BN-P-I; AOK-75WiP-NV-L3-00-XX80-BN-P-I; AOK-120WiP-NV-L3-00-XX80-BN-P-I; AOK-25WiPS-NVM-L3-00-XX70-BN-P; AOK-25WiPS-NVM-L3-00-XX80-BN-P; AOK-50WiPS-NVM-L3-00-XX70-BN-P; AOK-50WiPS-NVM-L3-00-XX80-BN-P; AOK-60WiPS-NVM-L3-00-XX70-BN-P; AOK-60WiPS-NVM-L3-00-XX80-BN-P; AOK-20WiPS-NVS-L3-00-XX70-BN-P; AOK-20WiPS-NVS-L3-00-XX80-BN-P; AOK-25WiPS-NVS-L3-00-XX70-BN-P; AOK-25WiPS-NVS-L3-00-XX80-BN-P; AOK-50WiPS-NVS-L3-00-XX70-BN-P; AOK-50WiPS-NVS-L3-00-XX80-BN-P; AOK-60WiPS-NVS-L3-00-XX70-BN-P;



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AOK-60WiPS-NVS-L3-00-XX80-BN-P
(‘XX’ stands for CCT of LED, can be any numbers from 27 to 65, e.g. 27=2700K, 65=6500K; ‘BN’ stands for type of LED lens, can be T4 and T5; ‘P’ stands for internal code, can be ‘A’ or ‘D’)

AOK

Trade Mark



Product Type

LED Garden Light

Test Specification

The product is compliance with following standards under UK regulation:
Electromagnetic Compatibility Regulations 2016.
EN IEC 55015:2019/A11:2020,
EN IEC 61000-3-2:2019/A1:2021,
EN 61000-3-3:2013/A2:2021,
EN 61547:2009

Date of Receipt of EUT

2018-11-30; 2020-01-15; 2020-04-08; 2022-05-17

Start of Test

2018-11-30; 2020-01-15; 2020-04-08; 2022-05-17

Finish of Test

2019-01-14; 2020-01-15; 2020-04-11; 2022-05-26

Name of Engineer(s)

Zack Zeng

1.3 Brief Summary of Results

A brief summary of the tests carried out in accordance with EN IEC 55015, EN IEC 61000-3-2, EN 61000-3-3 and EN 61547 is shown below.

Specification	Clause	Test Description	Result	Comments/Base Standard
EN IEC 55015:2019/A11:2020	4.3.1	Conducted Disturbance at the electric power supply interface	Pass	
EN IEC 55015:2019/A11:2020	4.3.2	Conducted Disturbance at wired network interfaces other than power supply	N/A	
EN IEC 55015:2019/A11:2020	4.4	Conducted Disturbance at local wired ports other than electrical power supply interface	N/A	
EN IEC 55015:2019/A11:2020	4.5.2	Radiated Disturbance (9kHz to 30MHz)	Pass	
EN IEC 55015:2019/A11:2020	4.5.3	Radiated Disturbance (30MHz to 1GHz)	Pass	
EN IEC 61000-3-2:2019/A1:2021	7	Harmonic Current Emissions	Pass	
EN 61000-3-3:2013/A2:2021	5	Flicker*	N/A	
EN 61547:2009	5.2	Electrostatic discharge immunity test	Pass	IEC 61000-4-2
EN 61547:2009	5.3	Radiated, radio-frequency, electromagnetic field immunity test	Pass	IEC 61000-4-3
EN 61547:2009	5.4	Power frequency magnetic field immunity test**	N/A	
EN 61547:2009	5.5	Electrical fast transient /burst immunity test	Pass	IEC 61000-4-4
EN 61547:2009	5.6	Immunity to conducted disturbances, induced by radio-frequency fields	Pass	IEC 61000-4-6
EN 61547:2009	5.7	Surge immunity test	Pass	IEC 61000-4-5
EN 61547:2009	5.8	Voltage dips, short interruptions and voltage variations immunity test	Pass	IEC 61000-4-11

Note

**: Limits are not specified when LED luminaires with rating less than or equal to 600W (EN 61000-3-3: 2013/A2:2021, Annex A (A.2)).

***: Only applied to equipment containing components susceptible to magnetic fields, such as Hall elements or magnetic field sensors.

1.4 Product Information

This report is based on the report 6874018053204 to apply for UKCA. There is no EMC technical requirement difference, so the original test results are still effective, it is deemed to fulfill the relevant EMC requirement without further testing.

General product information:

The products named LED Garden Light covered in this report are class I LED street lights,

- Suitable for indoor and outdoor use,
- Equipped with non-user replaceable light source,
- All models are non-dimmable and have similar construction.
- Mounting height: not more than 12m

Model list:

Model no.	Rated input		ta (°C)	Driver model code	LED Qty. (pcs)	Size D*H (mm)	Weight (kg)	Max project area (m ²)
	Voltage (VAC)	Power (W)						
AOK-20WiP-NV-L3-00-XX70-BN-P-I	100-240	20	50	A, F	140	Φ460*80	7,6	0,14
AOK-25WiP-NV-L3-00-XX70-BN-P-I		25	50		140	Φ460*80	7,6	0,14
AOK-30WiP-NV-L3-00-XX70-BN-P-I		30	50		140	Φ460*80	7,6	0,14
AOK-40WiP-NV-L3-00-XX70-BN-P-I		40	50		140	Φ460*80	7,6	0,14
AOK-50WiP-NV-L3-00-XX70-BN-P-I		50	50		140	Φ460*80	7,6	0,14
AOK-60WiP-NV-L3-00-XX70-BN-P-I	100-240	60	50	B	140	Φ460*80	7,6	0,14
	220-240	60	50	D	140	Φ460*80	7,6	0,14
AOK-75WiP-NV-L3-00-XX70-BN-P-I	100-240	75	50	B, G	140	Φ460*80	7,6	0,14
	220-240	75	50	D	140	Φ460*80	7,6	0,14
AOK-120WiP-NV-L3-00-XX70-BN-P-I	100-240	120	40	C	196	Φ460*80	7,6	0,14
	220-240	120	50	E	196	Φ460*80	7,6	0,14
AOK-20WiP-NV-L3-00-XX80-BN-P-I	100-240	20	50	A, F	140	Φ460*80	7,6	0,14
AOK-25WiP-NV-L3-00-XX80-BN-P-I		25	50		140	Φ460*80	7,6	0,14
AOK-30WiP-NV-L3-00-XX80-BN-P-I		30	50		140	Φ460*80	7,6	0,14
AOK-40WiP-NV-L3-00-XX80-BN-P-I		40	50		140	Φ460*80	7,6	0,14
AOK-50WiP-NV-L3-00-XX80-BN-P-I		50	50		140	Φ460*80	7,6	0,14
AOK-60WiP-NV-L3-00-XX80-BN-P-I	100-240	60	50	B	140	Φ460*80	7,6	0,14
	220-240	60	50	D	140	Φ460*80	7,6	0,14
AOK-75WiP-NV-L3-00-XX80-BN-P-I	100-240	75	50	B, G	140	Φ460*80	7,6	0,14
	220-240	75	50	D	140	Φ460*80	7,6	0,14



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AOK-120WiP-NV-L3-00-XX80-BN-P-I	100-240	120	40	C	196	Φ460*80	7,6	0,14
	220-240	120	50	E	196	Φ460*80	7,6	0,14
AOK-25WiPS-NVM-L3-00-XX70-BN-P	220-240	25	50	A	140	Φ410*71	5,8	0,11
AOK-25WiPS-NVM-L3-00-XX80-BN-P	220-240	25	50	A	140	Φ410*71	5,8	0,11
AOK-50WiPS-NVM-L3-00-XX70-BN-P	220-240	50	50	A	140	Φ410*71	5,8	0,11
AOK-50WiPS-NVM-L3-00-XX80-BN-P	220-240	50	50	A	140	Φ410*71	5,8	0,11
AOK-60WiPS-NVM-L3-00-XX70-BN-P	220-240	60	50	B	140	Φ410*71	5,8	0,11
AOK-60WiPS-NVM-L3-00-XX80-BN-P	220-240	60	50	B	140	Φ410*71	5,8	0,11
AOK-20WiPS-NVS-L3-00-XX70-BN-P	100-240	20	50	H	140	Φ410*71	5,8	0,11
AOK-20WiPS-NVS-L3-00-XX80-BN-P	100-240	20	50	H	140	Φ410*71	5,8	0,11
AOK-25WiPS-NVS-L3-00-XX70-BN-P	100-240	25	50	H	140	Φ410*71	5,8	0,11
AOK-25WiPS-NVS-L3-00-XX80-BN-P	100-240	25	50	H	140	Φ410*71	5,8	0,11
AOK-50WiPS-NVS-L3-00-XX70-BN-P	100-240	50	50	I	140	Φ410*71	5,8	0,11
AOK-50WiPS-NVS-L3-00-XX80-BN-P	100-240	50	50	I	140	Φ410*71	5,8	0,11
AOK-60WiPS-NVS-L3-00-XX70-BN-P	100-240	60	50	J	140	Φ410*71	5,8	0,11
AOK-60WiPS-NVS-L3-00-XX80-BN-P	100-240	60	50	J	140	Φ410*71	5,8	0,11
Remark: - 'XX' stands for CCT of LED, can be any numbers from 27 to 65, e.g. 27=2700K, 65=6500K; - 'BN' stands for type of LED lens, can be T4 and T5 - 'P' stands for internal code, can be 'A' or 'D' - Dimming cord ends of LED driver covered by heat-shrink tube, can't be used in the products covered in this report								



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Model list for LED drivers:

Code	Model No.	Rated input	Rated output	ta/tc	Certificate
A	XLG-50-AB	100-240VAC; 50/60Hz; 0,62A	22-54VDC; SELV; CC; Max. 2,1A; U _{out} :57VDC; P _{rated} :50W	50°C (100-200); 60°C (200-240) / 90°C	DEKRA 35-106403*
B	XLG-75-H-AB	100-240VAC; 50/60Hz; 1,0A	27-56VDC; SELV; CC; Max. 2,1A; U _{out} :60VDC; P _{rated} :75,6W	50°C (100-200); 60°C (200-240) / 90°C	TÜV Rheinland HN 69261864*
C	XLG-150-H-AB	100-240VAC; 50/60Hz; 2,0A	27-56VDC; SELV; CC; 2,68-4,17A; U _{out} :60VDC; P _{rated} :150W	40°C (100-200); 55°C (200-240) / 90°C	DEKRA 35-108587*
D	Xi LP 100W 0.3-1.05A S1 230V 1175	220-240VAC; 50/60Hz; 0,45-0,51A	46-143VDC; Separating; CC; 0,3-1,05A; U _{out} :220VDC; P _{rated} :100W	50°C / 80°C	DEKRA 31-102283*
E	Xi LP 150W 0.3-1.05A S1 230V 1175	220-240VAC; 50/60Hz; 0,6-0,7A	72-214VDC; Separating; CC; 0,3-1,05A; U _{out} :320VDC; P _{rated} :150W	50°C / 80°C	DEKRA 31-102283*
F	SS-50VP-56DH	100-240VAC; 50/60Hz; 0,7A	22-56VDC; SELV; CC; 0,35-1,56A; U _{out} :60VDC; P _{rated} :50W	60°C / 90°C	Test with appliance#
G	SS-75VP-56DH	100-240VAC; 50/60Hz; 1,0A	22-56VDC; SELV; CC; 0,35-2,4A; U _{out} :60VDC; P _{rated} :75W	60°C / 90°C	DEKRA 35-111150*
H	SS-30VA-56/B	100-240VAC; 50/60Hz; 0,5A	CC; 22-56VDC; 0,45-0,95A; U _{out} :60VDC; Prated:30W; IP67; SELV; independent	60°C / 90°C	DEKRA ENEC CERT: 35- 112032
I	SS-50VA-56/B	100-240VAC; 50/60Hz; 0,6A	CC; 22-56VDC; 0,75-1,55A; U _{out} :60VDC; Prated:50W; IP67; SELV; independent	60°C / 90°C	
J	SS-60VA-L50B	100-240VAC; 50/60Hz; 0,8A	CC; 28-50VDC; 0,96-1,66A; U _{out} :60VDC; Prated:60W; IP67; SELV; independent	60°C / 90°C	DEKRA ENEC CERT: 35- 117065
Remark: dimming cord ends of LED driver covered by heat-shrink tube, can't be used in the products covered in this report					

Unless otherwise specified, the models AOK-50WiP-NV-L3-00-6570-T5-P-I; AOK-75WiP-NV-L3-00-6570-T5-P-I; AOK-120WiP-NV-L3-00-6570-T5-P-I, AOK-50WiPS-NVS-L3-00-6580-T4-A, AOK-60WiPS-NVS-L3-00-6580-T4-A were chosen as representative models to perform all tests.



China

1.4.1 Technical Description

The Equipment Under Test (EUT) was a LED Garden Light

Ratings: 50/60Hz; Other ratings see 'General product information' for details.

Protection Class: I

1.4.2 EUT Port/Cable Identification

Port	Max Cable Length specified	Usage	Type	Screened
Line L	/	/	/	/
Line N	/	/	/	/
Line PE	/	/	/	/

1.4.3 Test Configuration

Configuration	Description
AC Powered	AC 230/50Hz

1.4.4 Modes of Operation

Mode	Description
ON	The EUT was powered on and worked in max power.



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1.4.5 Performance Criteria

Performance criterion A: During the test, no change of the luminous intensity shall be observed and the regulating control, if any, shall operate during the test as intended.

Performance criterion B: During the test, the luminous intensity may change to any value. After the test, the luminous intensity shall be restored to its initial value within 1 min. Regulating controls need not function during the test, but after the test, the mode of the control shall be the same as before the test provided that during the test no mode changing commands were given.

Performance criterion C: During and after the test, any change of the luminous intensity is allowed and the lamp(s) may be extinguished. After the test, within 30 min, all functions shall return to normal, if necessary by temporary interruption of the mains supply and/or operating the regulating control.

Additional requirement for lighting equipment incorporating a starting device: After the test, the lighting equipment is switched off. After half an hour, it is switched on again. The lighting equipment shall start and operate as intended.

1.5 Deviations from the Standard

No deviations from the applicable test standard were made during testing.



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1.6 Test Location

Test Site 1:

TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch

Address:

Building 12 & 13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District, Shenzhen, 518052 China

Test Name	Name of Engineer(s)
Conducted Disturbance at the electric power supply interface	Lonnie Nie
Conducted Disturbance at wired network interfaces other than power supply	N/A
Conducted Disturbance at local wired ports other than electrical power supply interface	N/A
Radiated Disturbance (9kHz to 30MHz)	Lonnie Nie
Radiated Disturbance (30MHz to 1000MHz)	Tomao Sun
Harmonic Current Emissions	Molly Mo
Flicker	N/A
Electrostatic discharge immunity test	Felix Jiang
Radiated, radio-frequency, electromagnetic field immunity test	Abel Zhang
Power frequency magnetic field immunity test	N/A
Electrical fast transient /burst immunity test	Molly Mo
Surge immunity test	Felix Jiang
Immunity to conducted disturbances, induced by radio-frequency fields	Molly Mo
Voltage dips, short interruptions and voltage variations immunity test	Molly Mo

2 Test Details

2.1 Conducted Disturbance at the electric power supply interface

2.1.1 Specification Reference

EN IEC 55015:2019/A11:2020, Clause 4.3.1

2.1.2 Equipment Under Test

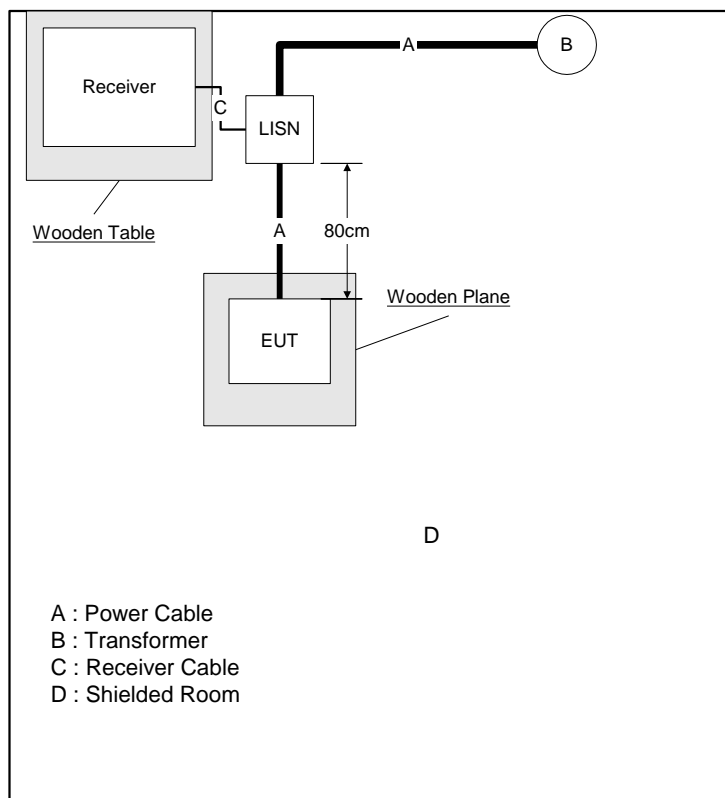
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AOK-120WiP-NV-L3-00-6570-T5-P-I, AOK-50WiPS-NVS-L3-00-6580-T4-A,
AOK-60WiPS-NVS-L3-00-6580-T4-A

2.1.3 Date of Test

2019-01-07; 2020-01-16, 2020-04-19, 2022-05-21

2.1.4 Test Method

The disturbance voltage shall be measured at the main terminals of the lighting equipment by means of the arrangement described in Figure 5 and 6 for the relevant type of equipment. The output terminals of the artificial mains network (V-network) and the terminals a-b shall be positioned $0,8\text{m} \pm 20\%$ apart and shall be connected by the two power conductors of a flexible three-core cable of 0,8m length.





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2.1.5 Environmental Conditions

Ambient Temperature 23.4 °C
Relative Humidity 51.6 %
Atmospheric Pressure 1012.0 mbar

2.1.6 Specification Limits

Disturbance voltage limits at the mains terminals		
Frequency range	Limits dB(μV)	
	Quasi-peak	Average
9kHz to 50kHz	110	--
50kHz to 150kHz	90 to 80	--
150kHz to 0.5MHz	66 to 56	56 to 46
0.5MHz to 5.0MHz	56	46
5.0MHz to 30MHz	60	50

Remark :

Level=Reading Level + Correction Factor

Correction Factor=Cable Loss + LISN Factor

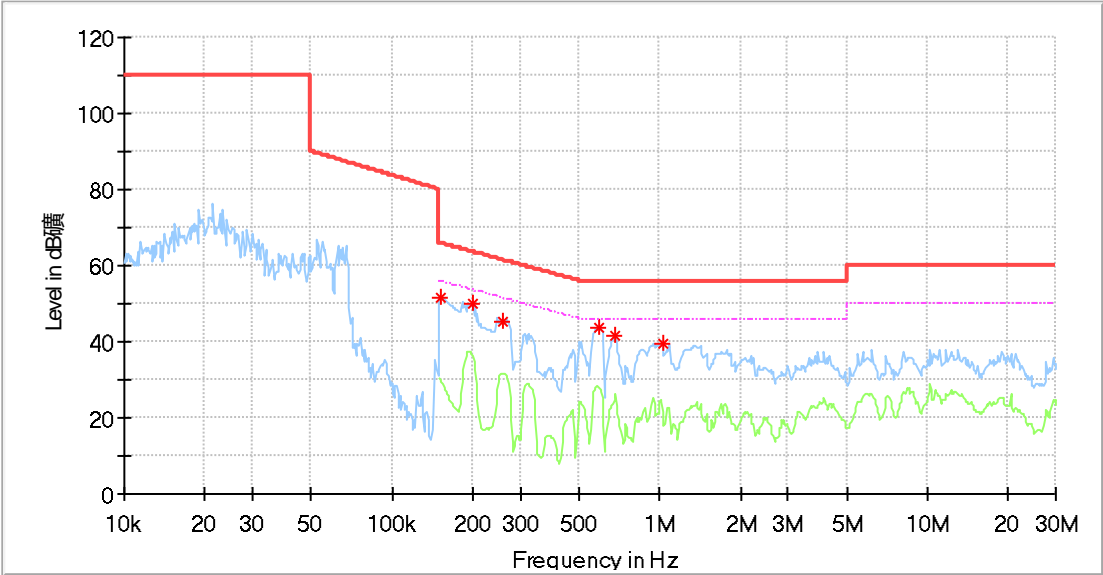
(The Reading Level is recorded by software which is not shown in the sheet)



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2.1.7 Test Results

M/N: AOK-50WiP-NV-L3-00-6570-T5-P-I
Op Cond.: ON
Test Spec: L
Comment: AC 230V/50Hz
Remark: XLG-50-AB

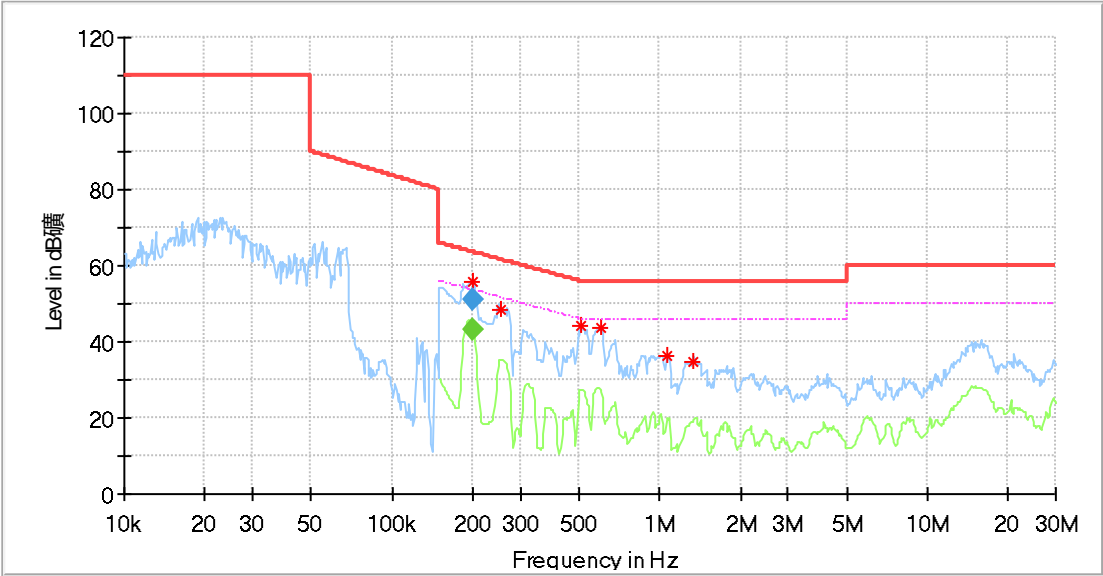


Frequency (MHz)	MaxPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
0.151500	51.80	---	65.92	14.12	L1	10.4
0.200176	49.79	---	63.60	13.82	L1	10.2
0.259279	45.44	---	61.45	16.01	L1	10.2
0.592163	43.47	---	56.00	12.53	L1	10.3
0.680676	41.65	---	56.00	14.35	L1	10.3
1.023568	39.26	---	56.00	16.74	L1	10.3



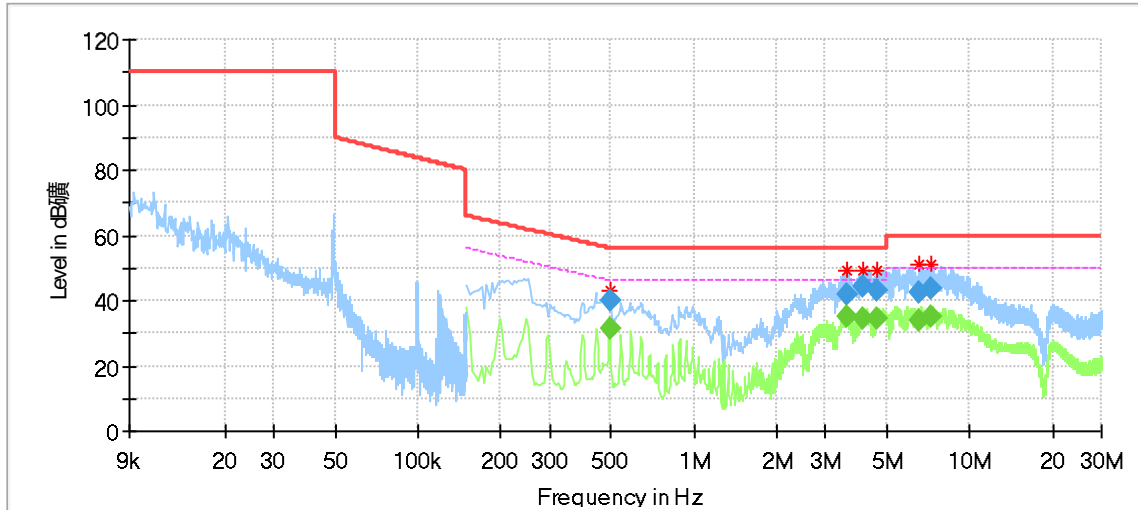
China

M/N: AOK-50WiP-NV-L3-00-6570-T5-P-I
Op Cond.: ON
Test Spec: N
Comment: AC 230V/50Hz
Remark: XLG-50-AB



Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.201559	---	43.05	53.55	10.50	N	10.2
0.201559	50.82	---	63.55	12.73	N	10.2

M/N: AOK-50WiP-NV-L3-00-6570-T5-P-I
 Op Cond.: ON
 Test Spec: L
 Comment: AC 230V/50Hz
 Remark: SS-50VP-56DH



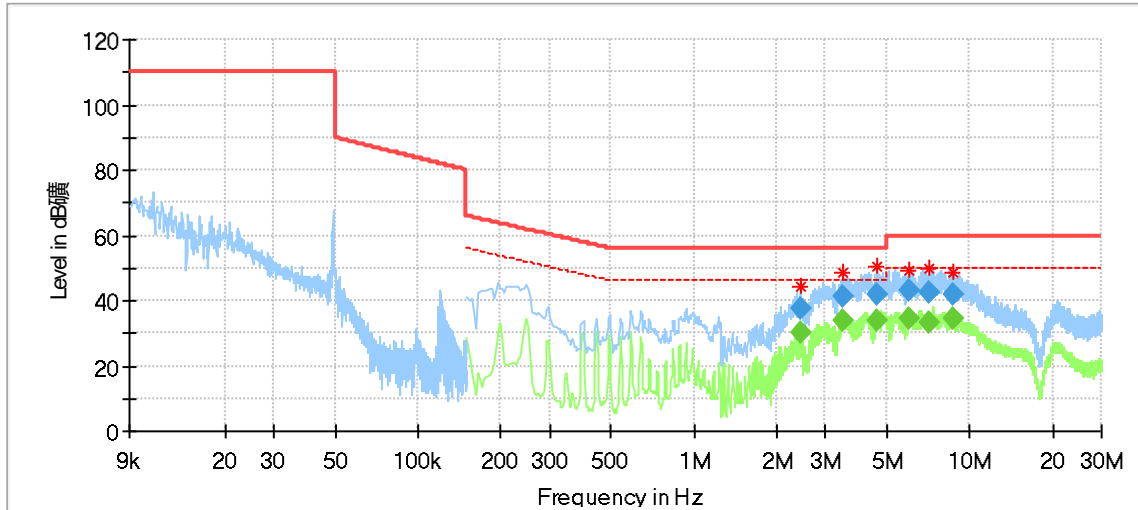
Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
0.494500	43.26	---	56.17	12.90	L1	9.6
3.558500	49.43	---	56.00	6.57	L1	9.6
4.077500	49.53	---	56.00	6.47	L1	9.6
4.645500	49.28	---	56.00	6.72	L1	9.6
6.569500	51.37	---	60.00	8.63	L1	9.7
7.217500	50.78	---	60.00	9.22	L1	9.7

Final_Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
0.494500	---	31.20	46.09	14.89	L1	9.6
0.494500	39.80	---	56.09	16.29	L1	9.6
3.558500	---	34.80	46.00	11.20	L1	9.6
3.558500	42.15	---	56.00	13.85	L1	9.6
4.077500	---	34.75	46.00	11.25	L1	9.6
4.077500	44.33	---	56.00	11.67	L1	9.6
4.645500	---	34.61	46.00	11.39	L1	9.6
4.645500	43.20	---	56.00	12.80	L1	9.6
6.569500	---	34.11	50.00	15.89	L1	9.7
6.569500	42.46	---	60.00	17.54	L1	9.7
7.217500	---	35.18	50.00	14.82	L1	9.7
7.217500	43.68	---	60.00	16.32	L1	9.7

M/N: AOK-50WiP-NV-L3-00-6570-T5-P-I
 Op Cond.: ON
 Test Spec: N
 Comment: AC 230V/50Hz
 Remark: SS-50VP-56DH



Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
2.426500	44.26	---	56.00	11.74	N	9.6
3.458500	48.79	---	56.00	7.21	N	9.6
4.642500	50.26	---	56.00	5.74	N	9.7
6.018500	49.15	---	60.00	10.85	N	9.7
7.154500	49.95	---	60.00	10.05	N	9.7
8.705500	48.91	---	60.00	11.09	N	9.7

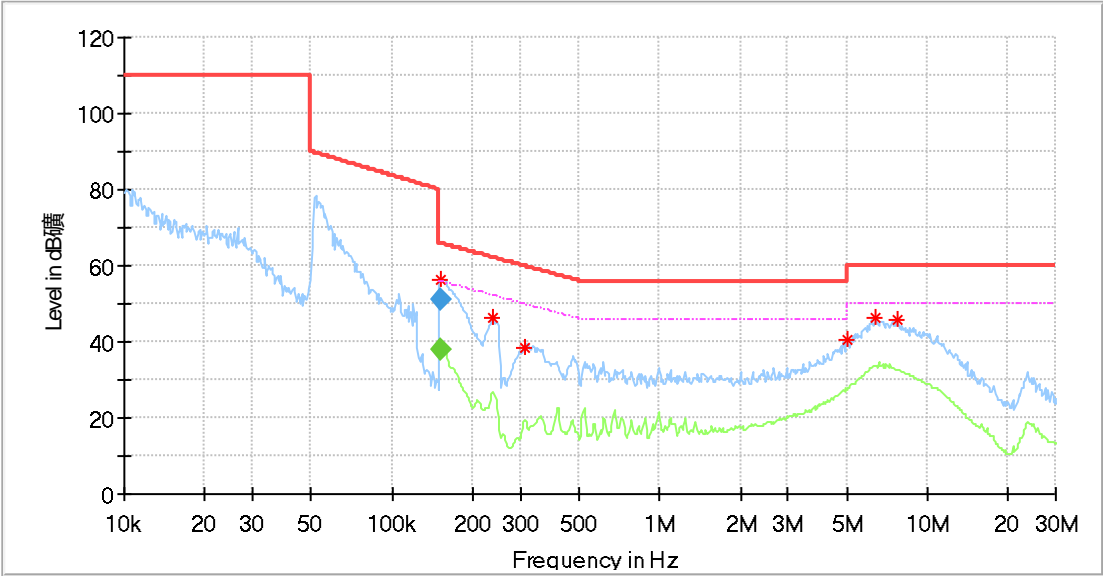
Final_Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
2.426500	---	29.95	---	---	N	9.6
2.426500	37.54	---	56.00	18.46	N	9.6
3.458500	---	34.03	---	---	N	9.6
3.458500	41.35	---	56.00	14.65	N	9.6
4.642500	---	33.75	---	---	N	9.7
4.642500	42.10	---	56.00	13.90	N	9.7
6.018500	---	34.41	---	---	N	9.7
6.018500	42.94	---	60.00	17.06	N	9.7
7.154500	---	33.00	---	---	N	9.7
7.154500	42.17	---	60.00	17.83	N	9.7
8.705500	---	34.20	---	---	N	9.7
8.705500	42.09	---	60.00	17.91	N	9.7



China

M/N: AOK-75WiP-NV-L3-00-6570-T5-P-I
Op Cond.: ON
Test Spec: L
Comment: AC 230V/50Hz
Remark: Xi LP 100W 0.3-1.05A S1 230V 1175

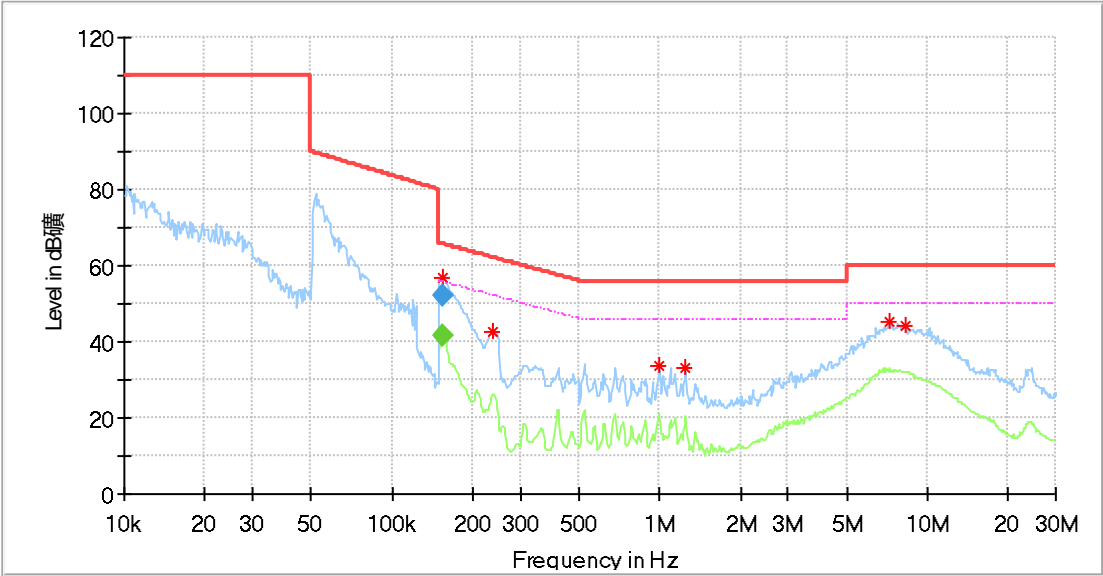


Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
0.153061	---	37.80	55.83	18.03	L1	10.2
0.153061	51.26	---	65.83	14.57	L1	10.2



China

M/N: AOK-75WiP-NV-L3-00-6570-T5-P-I
Op Cond.: ON
Test Spec: N
Comment: AC 230V/50Hz
Remark: Xi LP 100W 0.3-1.05A S1 230V 1175

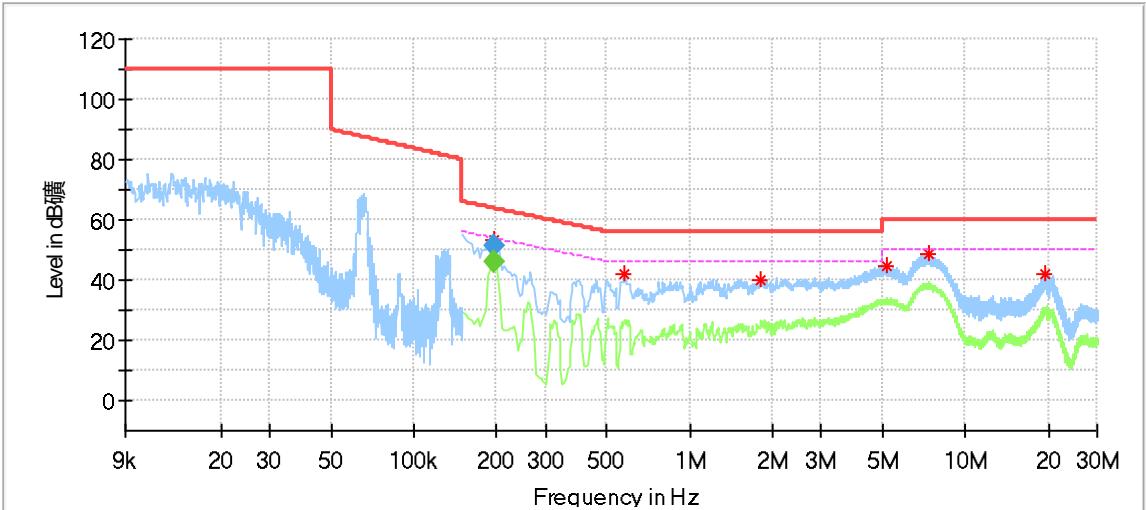


Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
0.154592	---	41.75	55.75	14.00	N	10.2
0.154592	52.20	---	65.75	13.55	N	10.2



China

M/N: AOK-75WiP-NV-L3-00-6570-T5-P-I
Op Cond.: ON
Test Spec: L
Comment: AC 230V/50Hz
Remark: XLG-75-H-AB



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.195435	53.04	---	63.69	10.66	L1	9.24
0.582000	41.76	---	56.00	14.24	L1	9.20
1.814000	39.90	---	56.00	16.10	L1	9.22
5.190000	44.87	---	60.00	15.13	L1	9.31
7.310000	48.45	---	60.00	11.55	L1	9.36
19.474000	41.81	---	60.00	18.19	L1	9.46

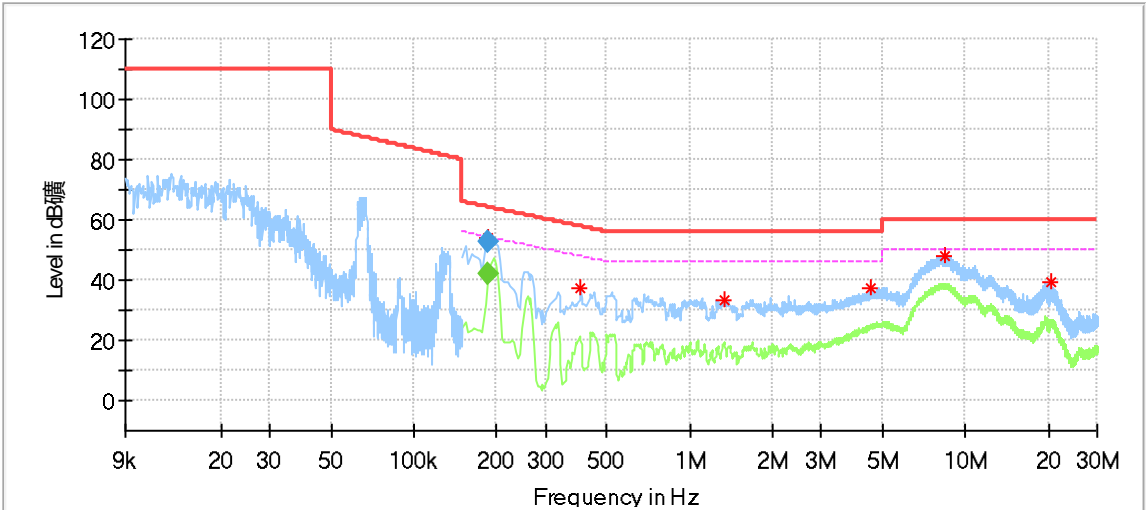
Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.195435	---	45.86	53.80	7.94	L1	9.24
0.195435	51.28	---	63.80	12.52	L1	9.24



China

M/N: AOK-75WiP-NV-L3-00-6570-T5-P-I
Op Cond.: ON
Test Spec: N
Comment: AC 230V/50Hz
Remark: XLG-75-H-AB



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.187000	54.33	---	64.21	9.89	N	9.40
0.402000	37.50	---	57.81	20.31	N	9.38
1.346000	33.58	---	56.00	22.42	N	9.41
4.522000	37.00	---	56.00	19.00	N	9.48
8.378000	47.82	---	60.00	12.18	N	9.59
20.298000	39.13	---	60.00	20.87	N	9.77

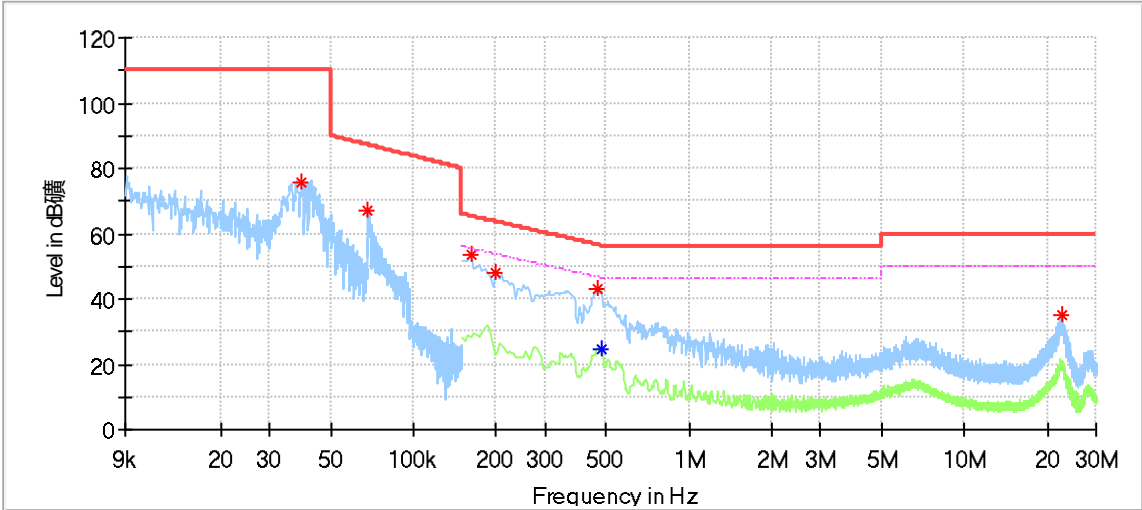
Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.187000	---	42.30	54.17	11.87	N	9.40
0.187000	52.77	---	64.17	11.40	N	9.40



China

M/N: AOK-75WiP-NV-L3-00-6570-T5-P-I
Op Cond.: ON
Test Spec: L
Comment: AC 230V/50Hz
Remark: SS-75VP-56DH



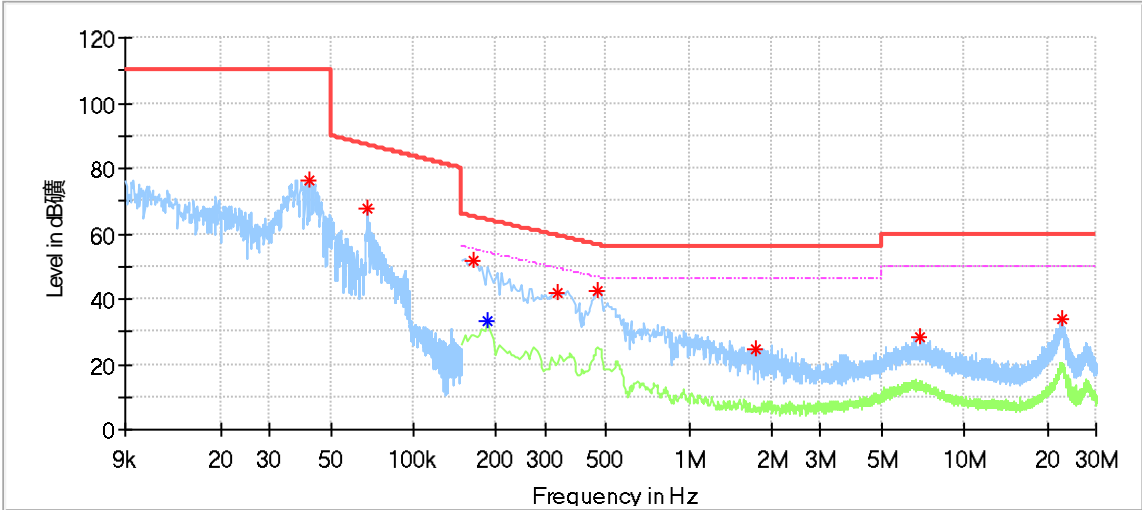
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.039400	75.62	---	110.00	34.38	L1	9.6
0.068600	67.31	---	87.12	19.81	L1	9.5
0.162000	53.65	---	65.36	11.71	L1	9.5
0.198000	48.27	---	63.69	15.42	L1	9.5
0.470000	42.87	---	56.51	13.65	L1	9.5
0.478000	---	24.87	46.37	21.51	L1	9.5
22.470000	34.91	---	60.00	25.09	L1	9.8



China

M/N: AOK-75WiP-NV-L3-00-6570-T5-P-I
Op Cond.: ON
Test Spec: N
Comment: AC 230V/50Hz
Remark: SS-75VP-56DH



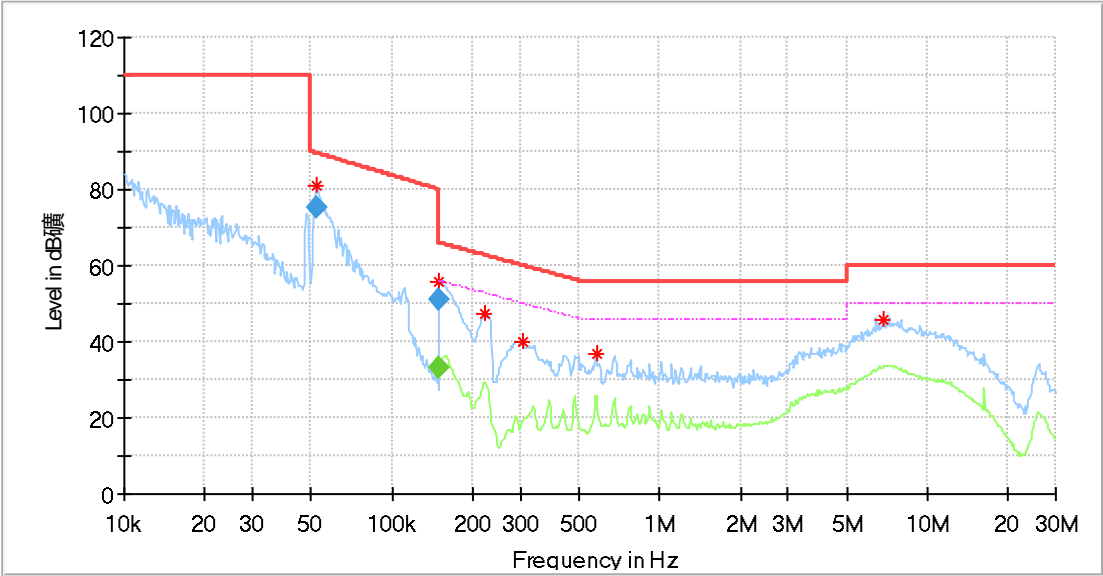
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.042200	76.42	---	110.00	33.58	N	9.6
0.068200	67.47	---	87.17	19.71	N	9.5
0.166000	51.93	---	65.16	13.23	N	9.5
0.186000	---	33.20	54.21	21.01	N	9.5
0.334000	41.66	---	59.35	17.69	N	9.6
0.470000	42.34	---	56.51	14.18	N	9.6
1.750000	24.40	---	56.00	31.60	N	9.6
6.918000	28.02	---	60.00	31.98	N	9.7
22.558000	33.79	---	60.00	26.21	N	9.9



China

M/N: AOK-120WiP-NV-L3-00-6570-T5-P-I
Op Cond.: ON
Test Spec: L
Comment: AC 230V/50Hz
Remark: Xi LP 150W 0.3-1.05A S1 230V 1175

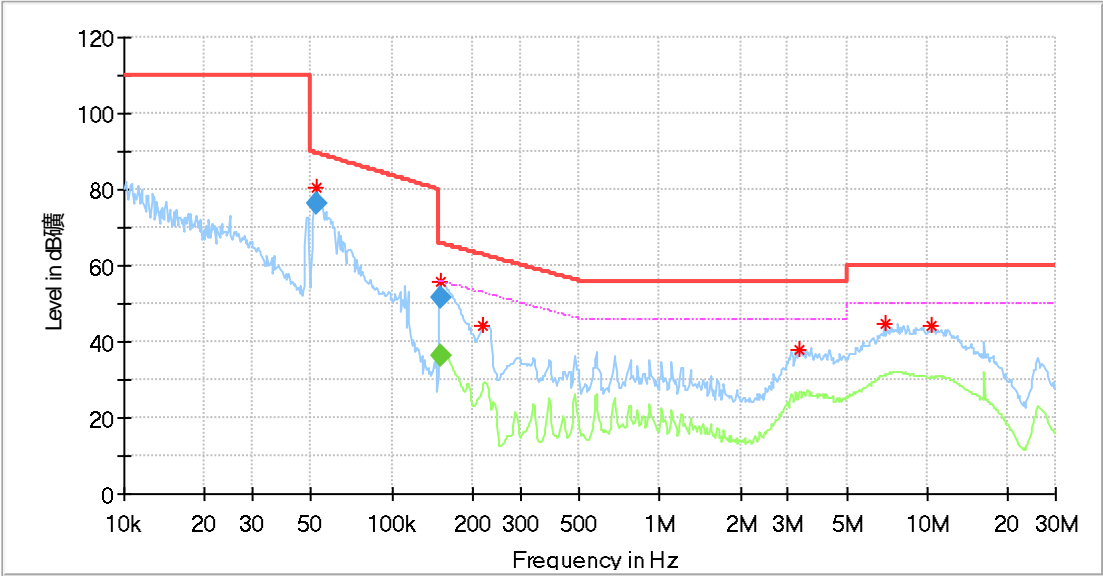


Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
0.051957	75.22	---	89.65	14.43	L1	10.6
0.150000	---	33.30	56.00	22.70	L1	10.5
0.150000	50.85	---	66.00	15.15	L1	10.5



China

M/N: AOK-120WiP-NV-L3-00-6570-T5-P-I
Op Cond.: ON
Test Spec: N
Comment: AC 230V/50Hz
Remark: Xi LP 150W 0.3-1.05A S1 230V 1175

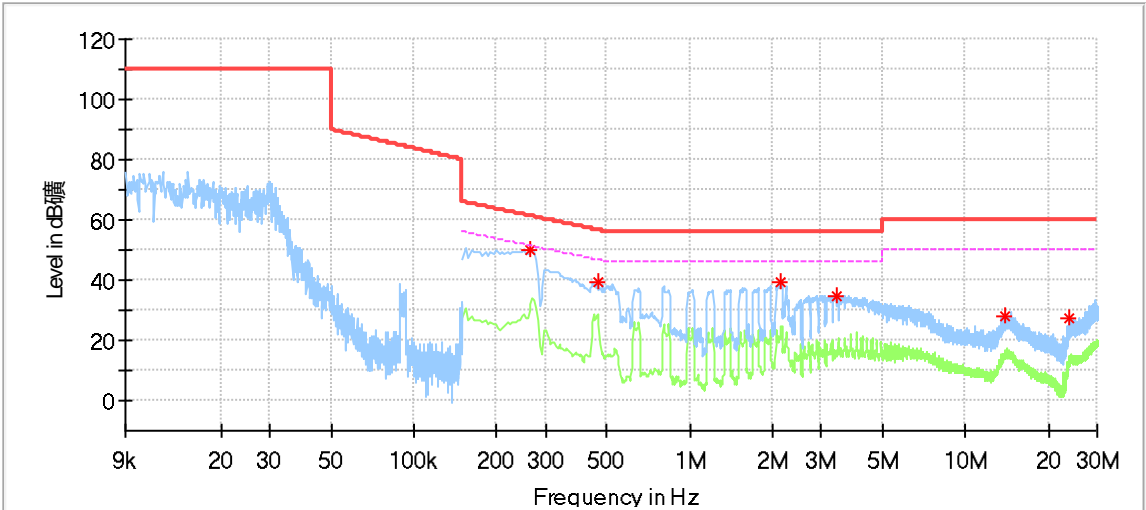


Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.051957	76.45	---	89.65	13.20	N	10.6
0.153015	---	36.40	55.83	19.43	N	10.3
0.153015	51.38	---	65.83	14.45	N	10.3



China

M/N: AOK-120WiP-NV-L3-00-6570-T5-P-I
Op Cond.: ON
Test Spec: L
Comment: AC 230V/50Hz
Remark: XLG-150-H-AB



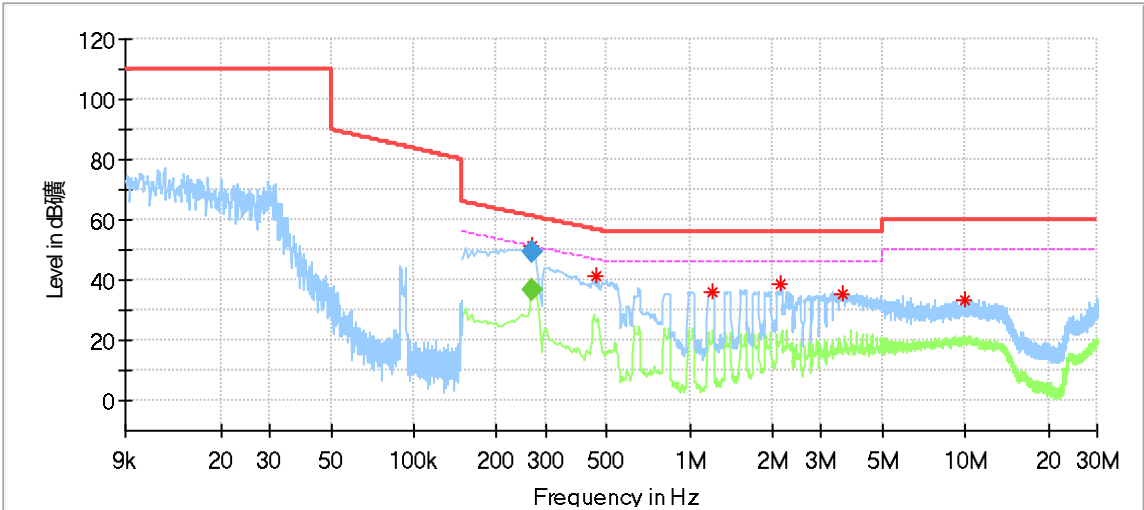
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.266000	50.13	---	61.24	11.11	L1	9.22
0.466000	39.54	---	56.59	17.05	L1	9.20
2.142000	39.48	---	56.00	16.52	L1	9.23
3.386000	34.83	---	56.00	21.17	L1	9.26
13.958000	28.11	---	60.00	31.89	L1	9.39
23.858000	27.62	---	60.00	32.38	L1	9.50



China

M/N: AOK-120WiP-NV-L3-00-6570-T5-P-I
Op Cond.: ON
Test Spec: N
Comment: AC 230V/50Hz
Remark: XLG-150-H-AB



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.268155	51.56	---	61.12	9.56	N	9.39
0.462000	41.14	---	56.66	15.52	N	9.39
1.210000	36.03	---	56.00	19.97	N	9.40
2.150000	38.63	---	56.00	17.37	N	9.42
3.602000	35.03	---	56.00	20.97	N	9.46
9.906000	33.30	---	60.00	26.70	N	9.61

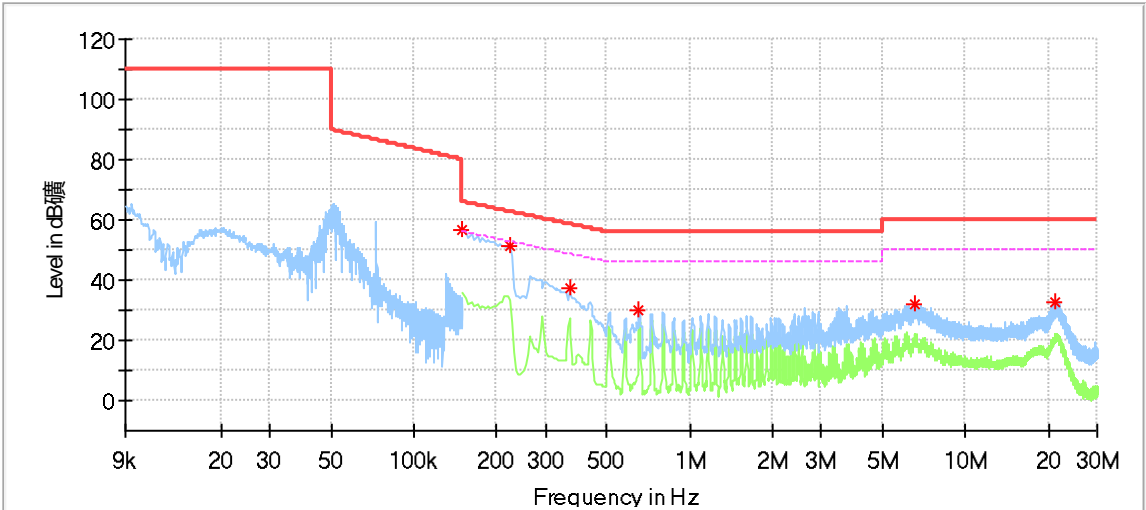
Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.268155	---	36.42	51.18	14.76	N	9.39
0.268155	49.41	---	61.18	11.77	N	9.39



China

M/N: AOK-50WiPS-NVS-L3-00-6580-T4-A
Op Cond.: ON
Test Spec: L
Comment: AC 230V/50Hz
Remark: SS-50VA-56/B



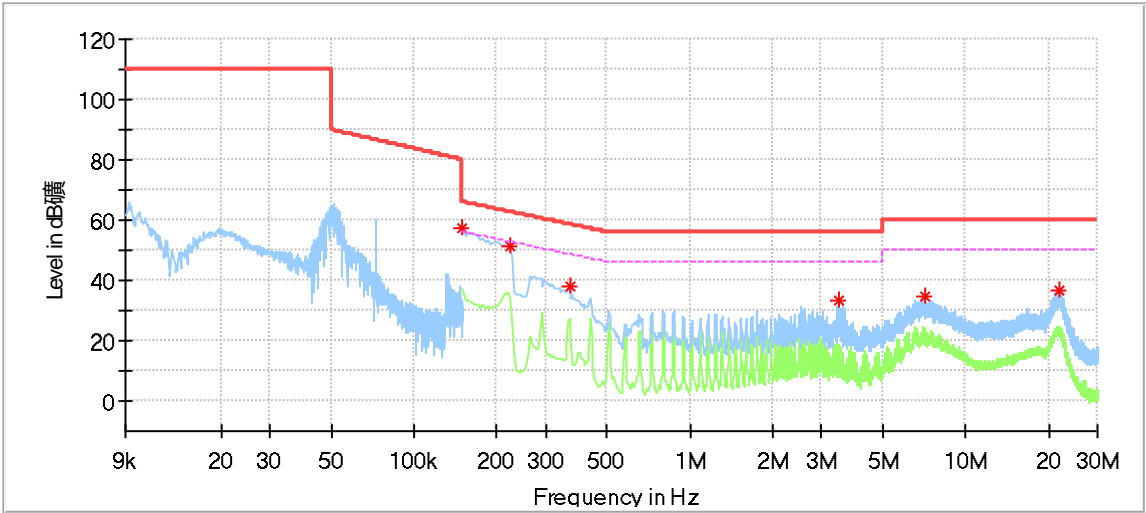
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	Corr. (dB)
0.150000	56.92	---	66.00	9.08	L1	9.25	---
0.222000	51.31	---	62.74	11.44	L1	9.23	---
0.366000	37.54	---	58.59	21.05	L1	9.21	---
0.654000	29.92	---	56.00	26.08	L1	9.20	---
6.582000	32.02	---	60.00	27.98	L1	9.35	---
21.242000	32.67	---	60.00	27.33	L1	9.49	---



China

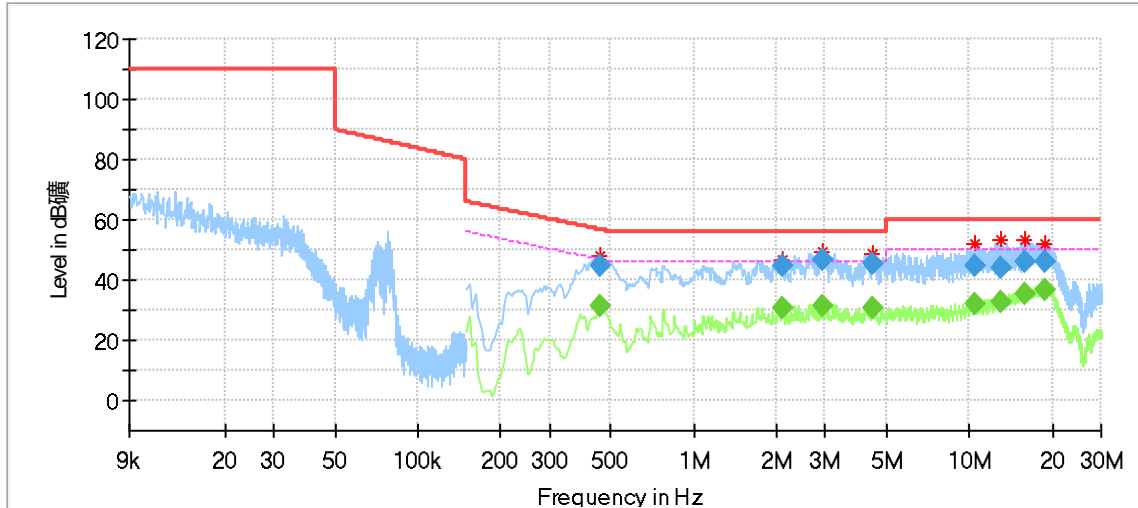
M/N: AOK-50WiPS-NVS-L3-00-6580-T4-A
Op Cond.: ON
Test Spec: N
Comment: AC 230V/50Hz
Remark: SS-50VA-56/B



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.150000	57.17	---	66.00	8.83	N	9.40
0.222000	51.48	---	62.74	11.26	N	9.39
0.366000	37.67	---	58.59	20.92	N	9.39
3.490000	33.06	---	56.00	22.94	N	9.46
7.062000	34.50	---	60.00	25.50	N	9.56
21.818000	36.57	---	60.00	23.43	N	9.80

M/N: AOK-60WiPS-NVS-L3-00-6580-T4-A
 Op Cond.: ON
 Test Spec: L
 Comment: AC 230V/50Hz
 Remark: SS-60VA-L50B



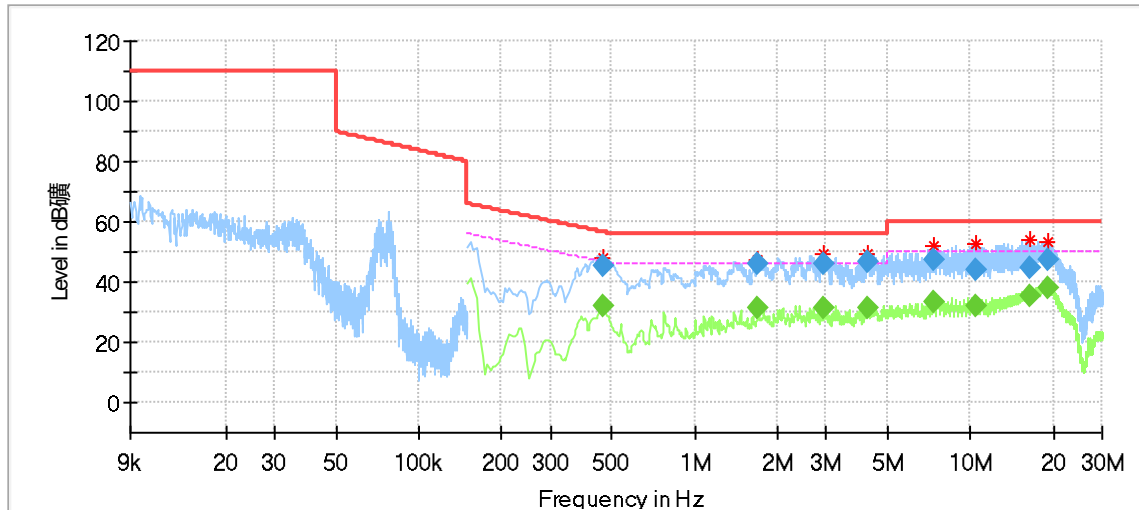
Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
0.461500	47.89	---	56.59	8.69	L1	9.20
2.085500	46.55	---	56.00	9.45	L1	9.23
2.933500	49.47	---	56.00	6.53	L1	9.25
4.481500	49.00	---	56.00	7.00	L1	9.29
10.429500	51.67	---	60.00	8.33	L1	9.39
12.949500	53.18	---	60.00	6.82	L1	9.39
15.986500	53.25	---	60.00	6.75	L1	9.40
18.866500	52.11	---	60.00	7.89	L1	9.45

Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
0.461500	---	31.18	46.67	15.49	L1	9.20
0.461500	44.57	---	56.67	12.10	L1	9.20
2.085500	---	30.62	46.00	15.38	L1	9.23
2.085500	44.67	---	56.00	11.33	L1	9.23
2.933500	---	31.08	46.00	14.92	L1	9.25
2.933500	46.82	---	56.00	9.18	L1	9.25
4.481500	---	30.46	46.00	15.54	L1	9.29
4.481500	45.43	---	56.00	10.57	L1	9.29
10.429500	---	32.24	50.00	17.76	L1	9.39
10.429500	44.99	---	60.00	15.01	L1	9.39
12.949500	---	32.51	50.00	17.49	L1	9.39
12.949500	44.20	---	60.00	15.80	L1	9.39
15.986500	---	35.42	50.00	14.58	L1	9.40
15.986500	46.03	---	60.00	13.97	L1	9.40

M/N: AOK-60WiPS-NVS-L3-00-6580-T4-A
 Op Cond.: ON
 Test Spec: N
 Comment: AC 230V/50Hz
 Remark: SS-60VA-L50B

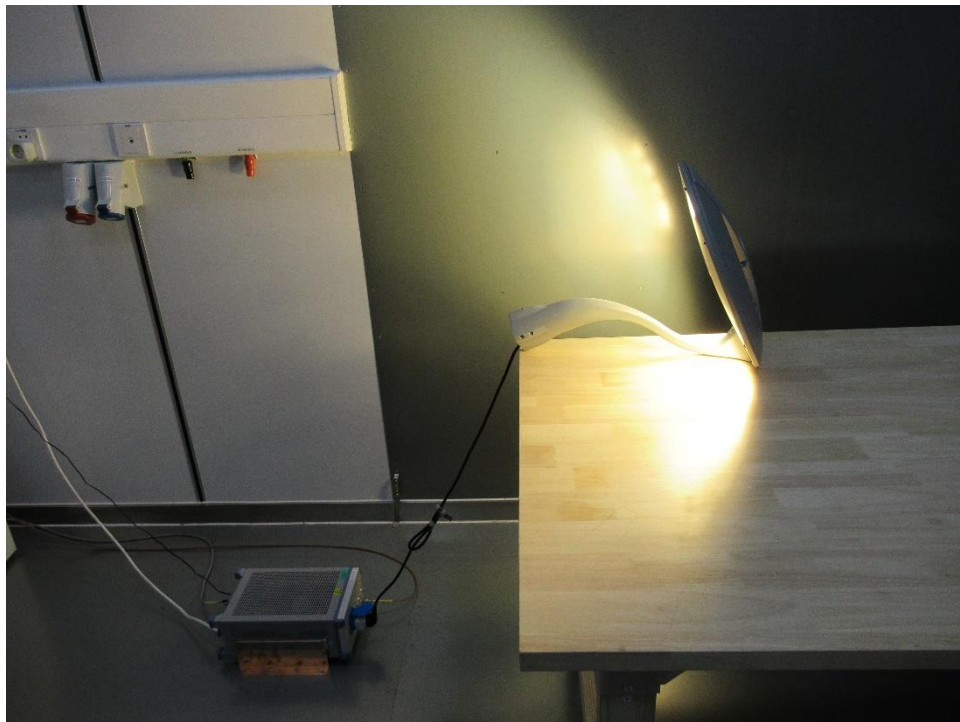


Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
0.462500	48.31	---	56.73	8.42	N	9.39
1.697500	47.36	---	56.00	8.64	N	9.41
2.934500	49.27	---	56.00	6.73	N	9.44
4.237500	49.18	---	56.00	6.82	N	9.48
7.321500	51.93	---	60.00	8.07	N	9.57
10.501500	52.77	---	60.00	7.23	N	9.61
16.357500	53.78	---	60.00	6.22	N	9.66
18.945500	53.06	---	60.00	6.94	N	9.73

Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
0.462500	---	32.31	46.65	14.34	N	9.39
0.462500	45.13	---	56.65	11.52	N	9.39
1.697500	---	31.63	46.00	14.37	N	9.41
1.697500	45.76	---	56.00	10.24	N	9.41
2.934500	---	31.26	46.00	14.74	N	9.44
2.934500	46.23	---	56.00	9.77	N	9.44
4.237500	---	31.49	46.00	14.51	N	9.48
4.237500	46.42	---	56.00	9.58	N	9.48
7.321500	---	33.14	50.00	16.86	N	9.57
7.321500	47.55	---	60.00	12.45	N	9.57
10.501500	---	32.23	50.00	17.77	N	9.61
10.501500	44.22	---	60.00	15.78	N	9.61
16.357500	---	35.55	50.00	14.45	N	9.66
16.357500	44.67	---	60.00	15.33	N	9.66



Test Setup

2.1.8 Test Location

This test was carried out in conducted emission shielded room.

2.2 Radiated Disturbance (9KHz to 30MHz)

2.2.1 Specification Reference

EN IEC 55015:2019/A11:2020, Clause 4.5.2

2.2.2 Equipment Under Test

AOK-50WiP-NV-L3-00-6570-T5-P-I, AOK-75WiP-NV-L3-00-6570-T5-P-I,
AOK-120WiP-NV-L3-00-6570-T5-P-I, AOK-50WiPS-NVS-L3-00-6580-T4-A,
AOK-60WiPS-NVS-L3-00-6580-T4-A

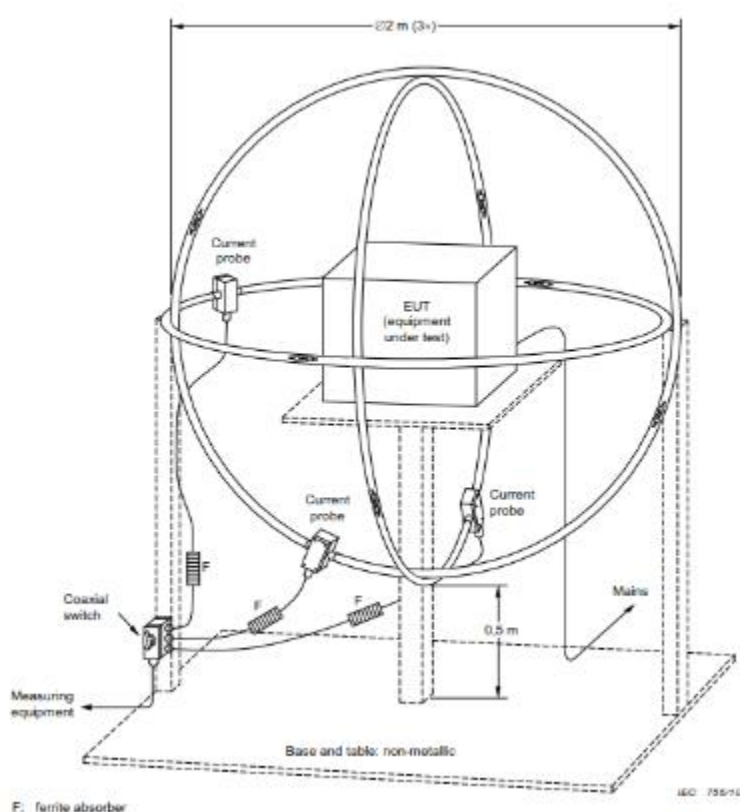
2.2.3 Date of Test

2019-01-07; 2020-01-16; 2020-04-09, 2022-05-21

2.2.4 Test Method

The magnetic component shall be measured by means of a loop antenna. The lighting equipment shall be placed in the center of the antenna.

The induced current in the loop antenna is measured by means of a current probe and the CISPR measuring receiver. By means of a coaxial switch, the three field directions can be measured in sequence.





China

2.2.5 Environmental Conditions

Ambient Temperature 23.1 °C
Relative Humidity 51.6 %
Atmospheric Pressure 1012.0 mbar

2.2.6 Specification Limits

Radiated disturbance limits in the frequency range 9kHz to 30MHz			
Frequency range	Limits dB(μA) for loop diameter		
	2 m	3 m	4 m
9kHz to 70kHz	88	81	75
70kHz to 150kHz	88 to 58	81 to 51	75 to 45
150kHz to 3.0MHz	58 to 22	51 to 15	45 to 9
3.0MHz to 30MHz	22	15 to 16	9 to 12

Remark :

Level=Reading Level + Correction Factor

Correction Factor=Loop Antenna Factor + Cable Loss

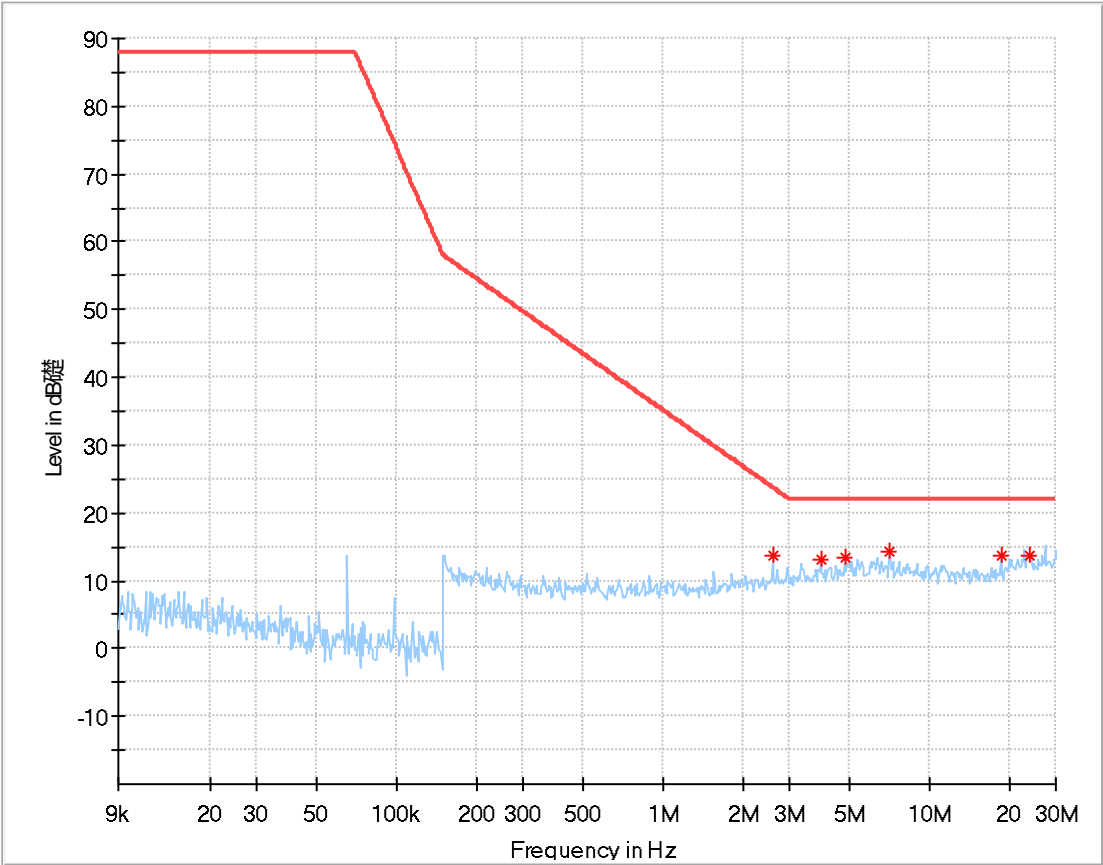
(The Reading Level is recorded by software which is not shown in the sheet)



China

2.2.7 Test Results

M/N: AOK-50WiP-NV-L3-00-6570-T5-P-I
Op Cond: ON
Test Spec: X
Comment: AC 230V/50Hz
Remark: XLG-50-AB

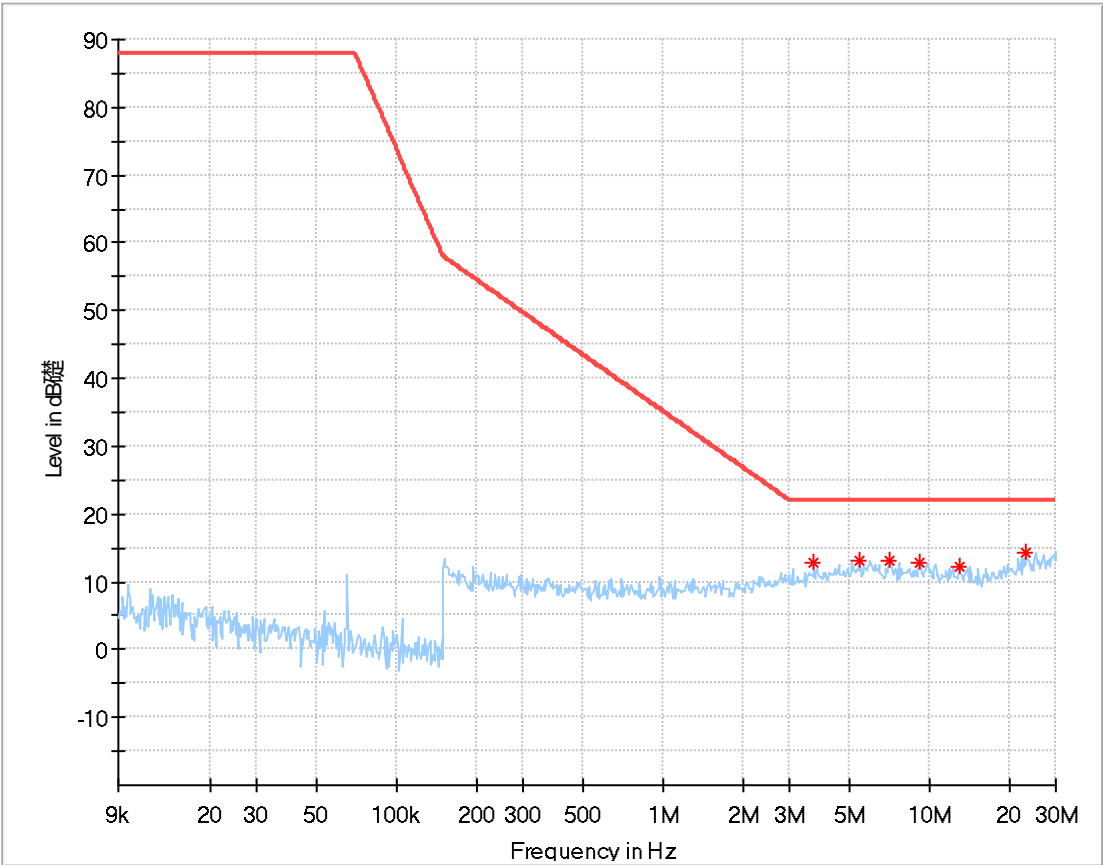


Frequency (MHz)	MaxPeak (dBµA)	Limit (dBµA)	Margin (dB)	Corr. (dB)
2.582287	13.60	23.80	10.20	6.1
3.921951	13.00	22.00	9.00	6.1
4.833381	13.39	22.00	8.61	6.1
7.124995	14.41	22.00	7.59	6.1
18.705005	13.68	22.00	8.32	6.2
23.750393	13.65	22.00	8.35	6.2



China

M/N: AOK-50WiP-NV-L3-00-6570-T5-P-I
Op Cond: ON
Test Spec: Y
Comment: AC 230V/50Hz
Remark: XLG-50-AB

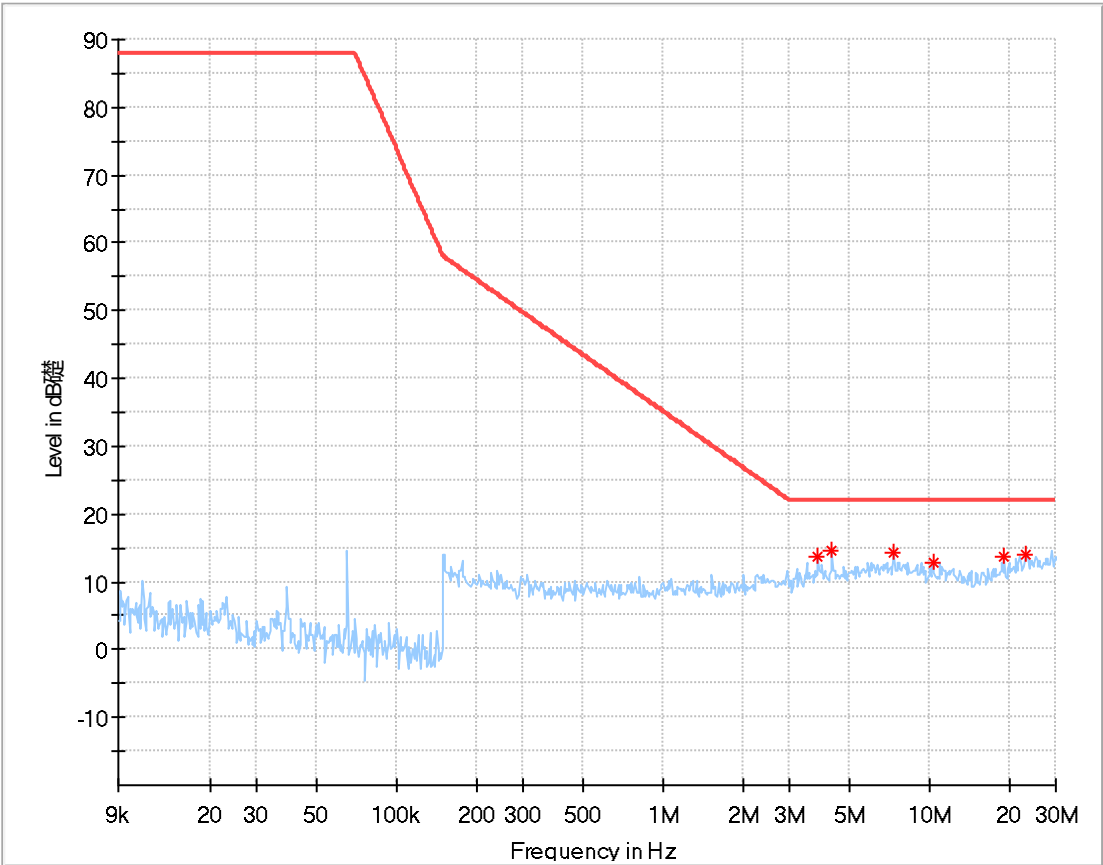


Frequency (MHz)	MaxPeak (dBµA)	Limit (dBµA)	Margin (dB)	Corr. (dB)
3.694655	12.80	22.00	9.20	6.1
5.500838	13.13	22.00	8.87	6.1
7.124995	13.21	22.00	8.79	6.1
9.228695	12.96	22.00	9.04	6.1
12.943955	12.31	22.00	9.69	6.2
23.282417	14.16	22.00	7.84	6.2



China

M/N: AOK-50WiP-NV-L3-00-6570-T5-P-I
Op Cond: ON
Test Spec: Z
Comment: AC 230V/50Hz
Remark: XLG-50-AB

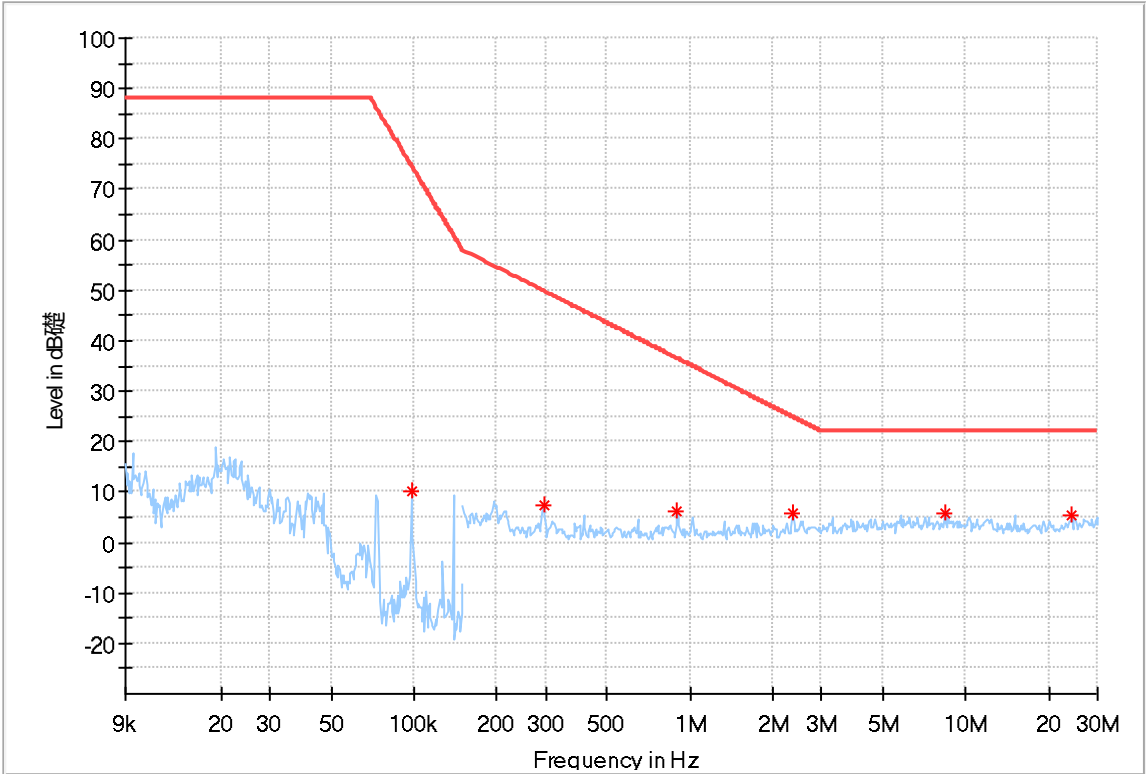


Frequency (MHz)	MaxPeak (dBµA)	Limit (dBµA)	Margin (dB)	Corr. (dB)
3.844673	13.58	22.00	8.42	6.1
4.332274	14.49	22.00	7.51	6.1
7.414299	14.31	22.00	7.69	6.1
10.399125	12.84	22.00	9.16	6.1
19.271786	13.79	22.00	8.21	6.2
23.282417	13.92	22.00	8.08	6.2



China

M/N: AOK-50WiP-NV-L3-00-6570-T5-P-I
Op Cond.: ON
Test Spec: X
Comment: AC 230V/50Hz
Remark: SS-50VP-56DH



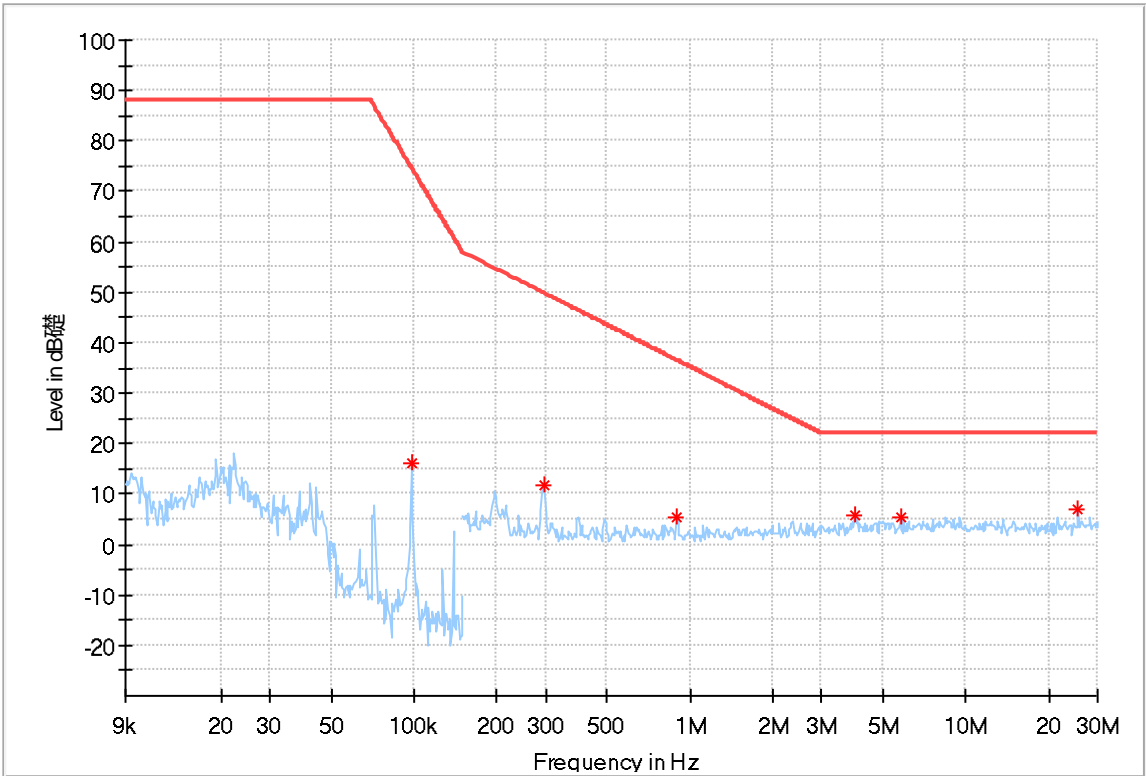
Critical_Freqs

Frequency (MHz)	MaxPeak (dBμA)	Limit (dBμA)	Margin (dB)	Axis	Corr. (dB)
0.098033	9.98	74.74	64.77	X	6.0
0.295084	7.33	49.87	42.54	X	6.0
0.899371	6.08	36.48	30.40	X	6.0
2.361088	5.89	24.88	18.98	X	6.1
8.354617	5.90	22.00	16.10	X	6.2
24.227776	5.26	22.00	16.74	X	6.4



China

M/N: AOK-50WiP-NV-L3-00-6570-T5-P-I
Op Cond.: ON
Test Spec: Y
Comment: AC 230V/50Hz
Remark: SS-50VP-56DH



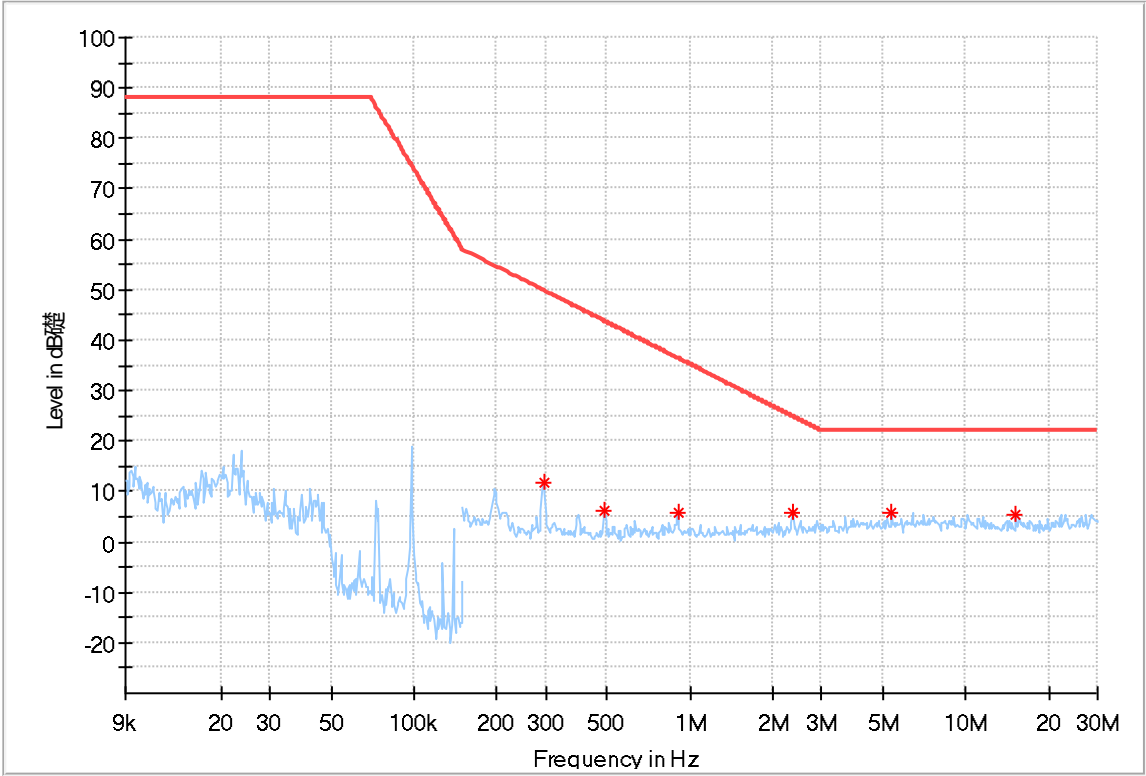
Critical_Freqs

Frequency (MHz)	MaxPeak (dBμA)	Limit (dBμA)	Margin (dB)	Axis	Corr. (dB)
0.098033	16.19	74.74	58.55	Y	6.0
0.295084	11.78	49.87	38.09	Y	6.0
0.899371	5.34	36.48	31.14	Y	6.0
3.961170	5.78	22.00	16.22	Y	6.1
5.781436	5.22	22.00	16.78	Y	6.2
25.463636	6.84	22.00	15.16	Y	6.4



China

M/N: AOK-50WiP-NV-L3-00-6570-T5-P-I
Op Cond.: ON
Test Spec: Z
Comment: AC 230V/50Hz
Remark: SS-50VP-56DH



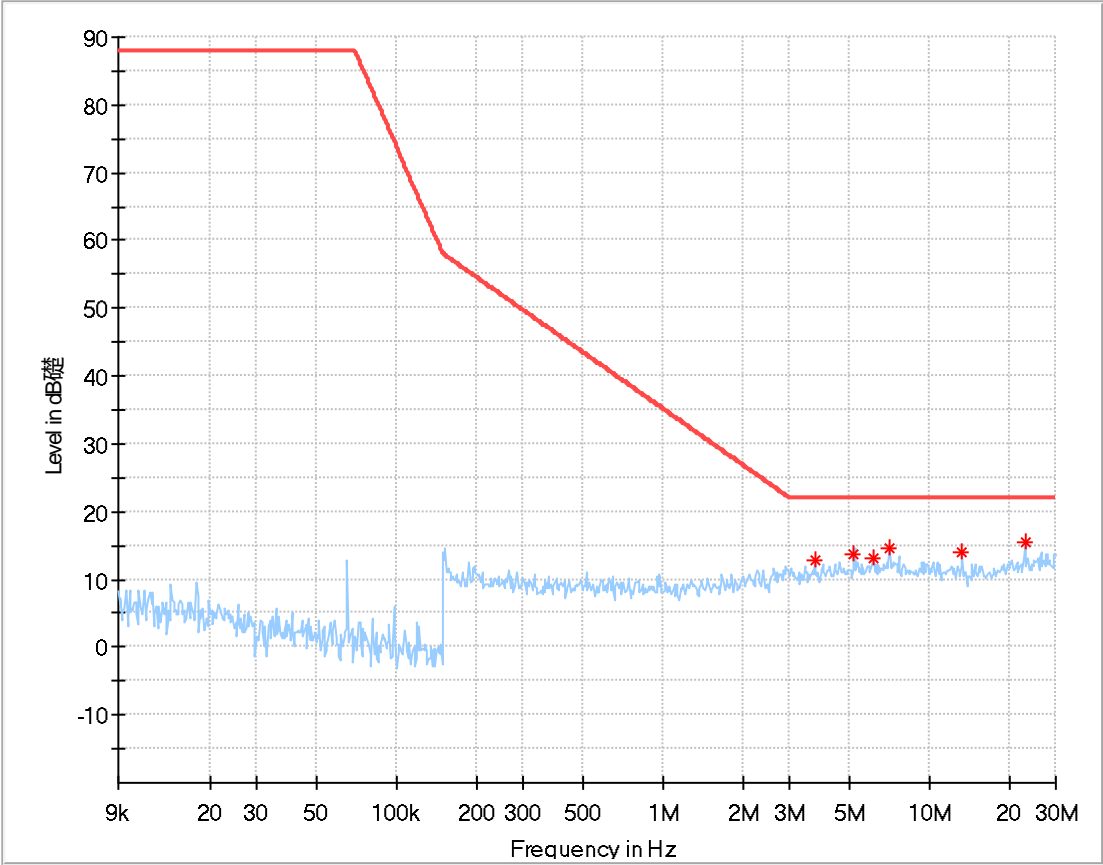
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµA)	Limit (dBµA)	Margin (dB)	Axis	Corr. (dB)
0.295084	11.91	49.87	37.96	Z	6.0
0.490157	6.08	43.77	37.69	Z	6.0
0.908365	5.76	36.36	30.60	Z	6.0
2.361088	5.88	24.88	19.00	Z	6.1
5.392450	5.64	22.00	16.36	Z	6.1
15.177806	5.29	22.00	16.71	Z	6.2



China

M/N: AOK-75WiP-NV-L3-00-6570-T5-P-I
Op Cond: ON
Test Spec: X
Comment: AC 230V/50Hz
Remark: Xi LP 100W 0.3-1.05A S1 230V 1175

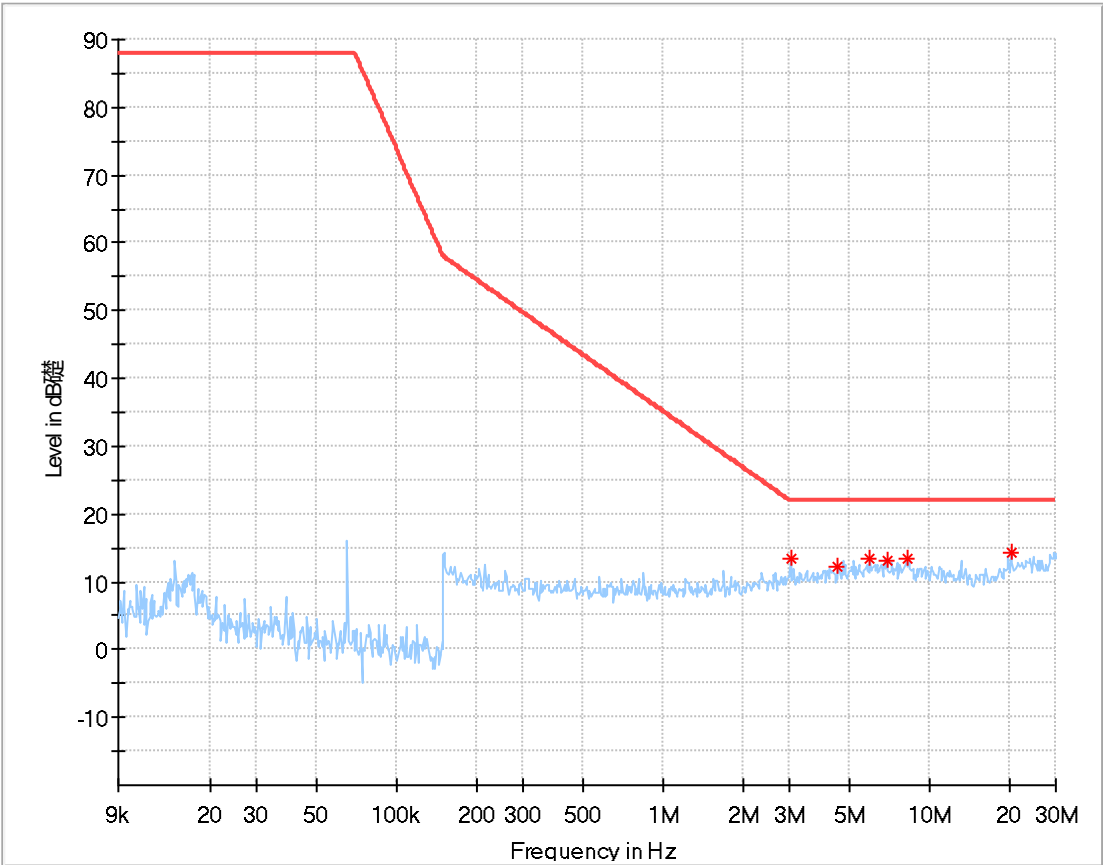


Frequency (MHz)	MaxPeak (dBμA)	Limit (dBμA)	Margin (dB)	Corr. (dB)
3.731602	12.80	22.00	9.20	6.1
5.233859	13.68	22.00	8.32	6.1
6.198482	13.13	22.00	8.87	6.1
7.124995	14.51	22.00	7.49	6.1
13.336170	14.11	22.00	7.89	6.2
23.051898	15.42	22.00	6.58	6.2



China

M/N: AOK-75WiP-NV-L3-00-6570-T5-P-I
Op Cond: ON
Test Spec: Y
Comment: AC 230V/50Hz
Remark: Xi LP 100W 0.3-1.05A S1 230V 1175

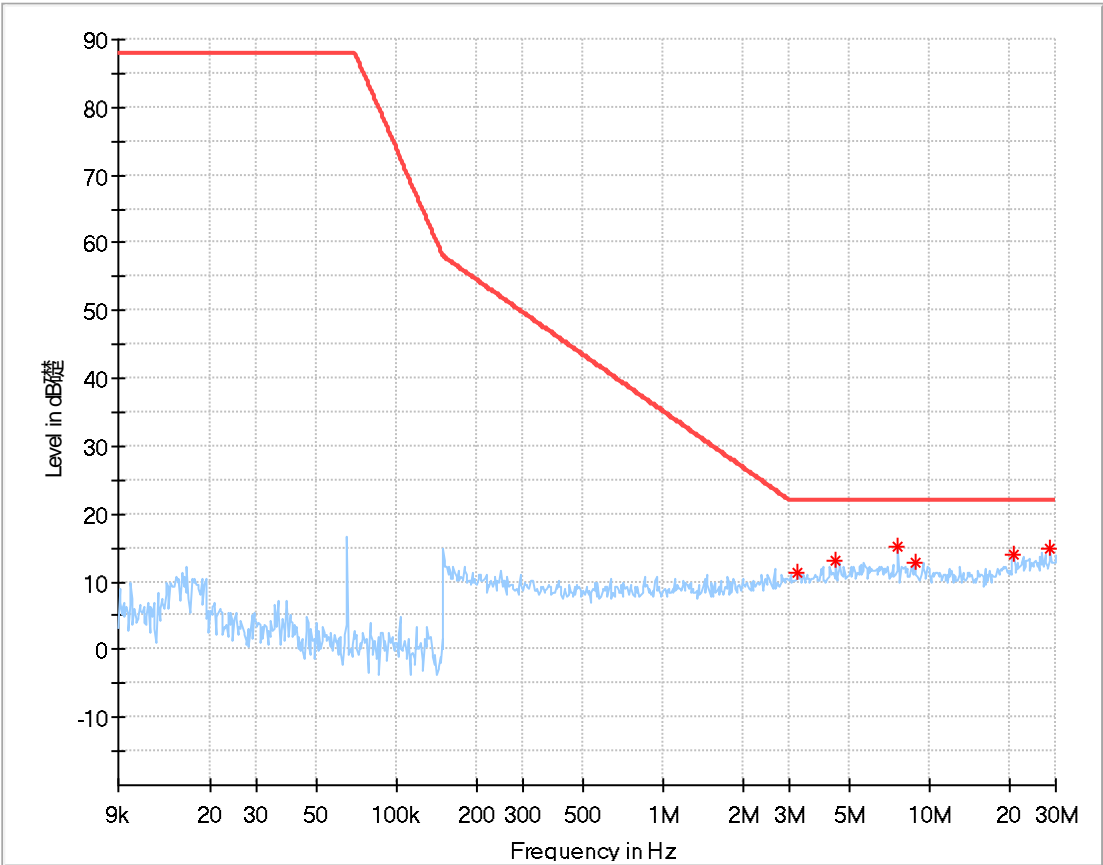


Frequency (MHz)	MaxPeak (dBµA)	Limit (dBµA)	Margin (dB)	Corr. (dB)
3.027934	13.47	22.00	8.53	6.1
4.553263	12.23	22.00	9.77	6.1
6.016186	13.30	22.00	8.70	6.1
6.984605	13.26	22.00	8.74	6.1
8.271898	13.41	22.00	8.59	6.1
20.457389	14.24	22.00	7.76	6.2



China

M/N: AOK-75WiP-NV-L3-00-6570-T5-P-I
Op Cond: ON
Test Spec: Z
Comment: AC 230V/50Hz
Remark: Xi LP 100W 0.3-1.05A S1 230V 1175

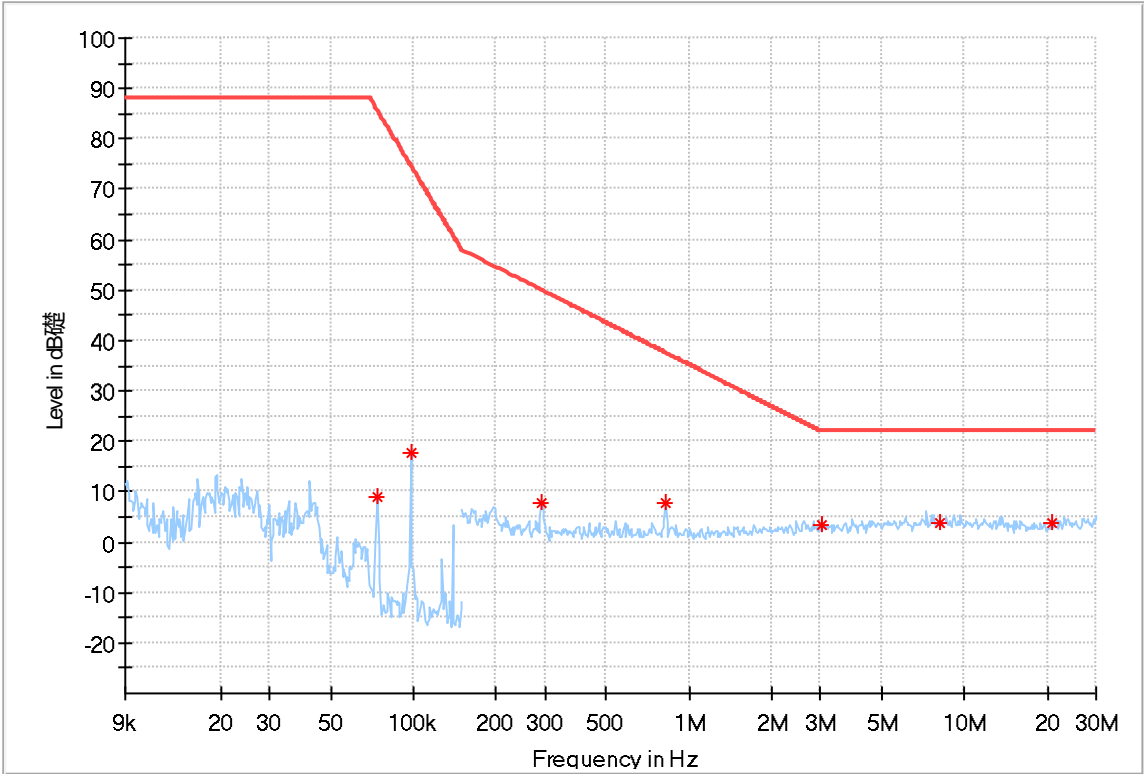


Frequency (MHz)	MaxPeak (dBµA)	Limit (dBµA)	Margin (dB)	Corr. (dB)
3.214213	11.48	22.00	10.52	6.1
4.463546	13.23	22.00	8.77	6.1
7.638959	15.06	22.00	6.94	6.1
8.868595	12.77	22.00	9.23	6.1
20.868582	14.04	22.00	7.96	6.2
28.693063	14.81	22.00	7.19	6.3



China

M/N: AOK-75WiP-NV-L3-00-6570-T5-P-I
Op Cond: ON
Test Spec: X
Comment: AC 230V/50Hz
Remark: SS-75VP-56DH



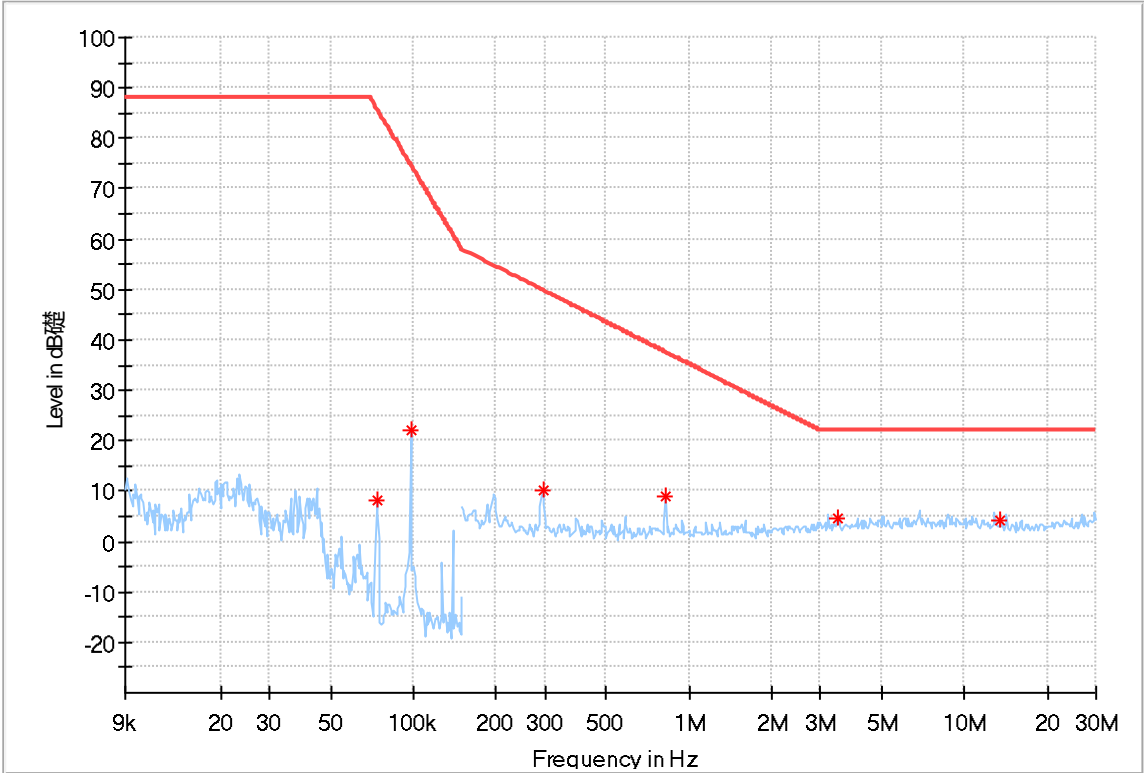
Critical_Freqs

Frequency (MHz)	MaxPeak (dBμA)	Limit (dBμA)	Margin (dB)	Axis	Corr. (dB)
0.074195	8.91	85.71	76.80	X	6.0
0.098033	17.60	74.74	57.14	X	6.0
0.292162	7.84	49.99	42.14	X	6.0
0.822331	7.57	37.55	29.98	X	6.0
3.027934	3.35	22.00	18.65	X	6.1
8.108909	3.82	22.00	18.18	X	6.2
20.661963	3.71	22.00	18.29	X	6.4



China

M/N: AOK-75WiP-NV-L3-00-6570-T5-P-I
Op Cond: ON
Test Spec: Y
Comment: AC 230V/50Hz
Remark: SS-75VP-56DH



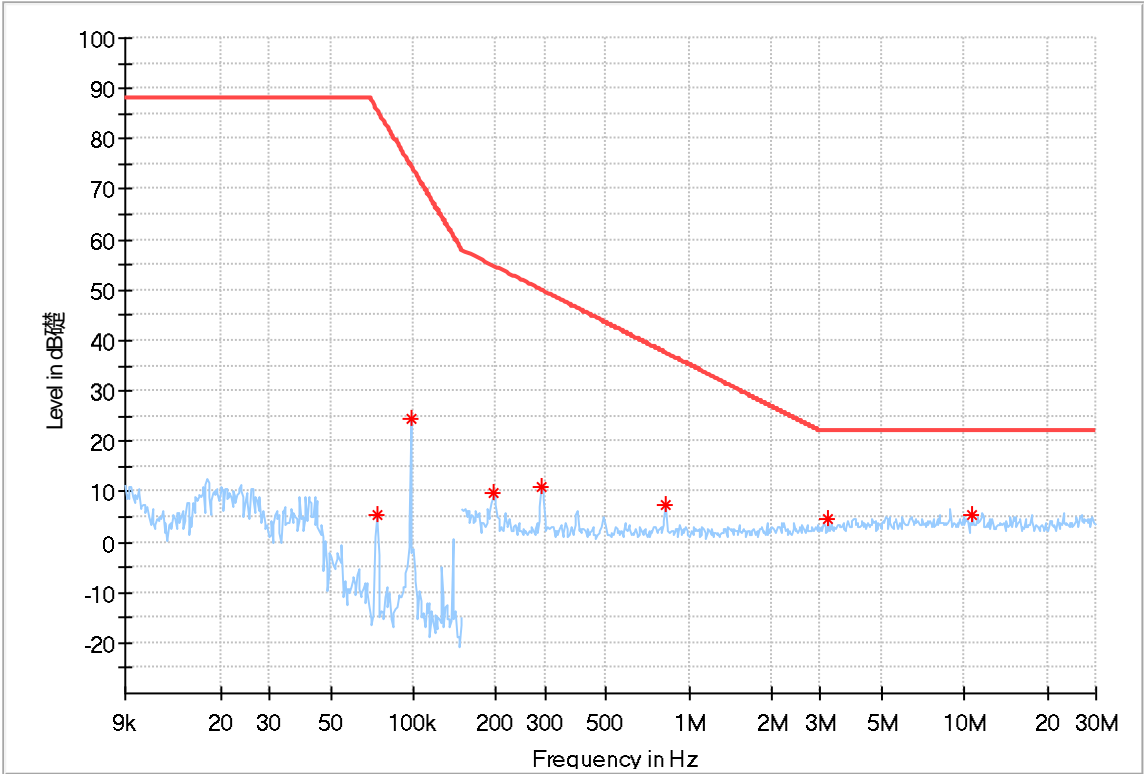
Critical_Freqs

Frequency (MHz)	MaxPeak (dBμA)	Limit (dBμA)	Margin (dB)	Axis	Corr. (dB)
0.073460	8.21	86.10	77.89	Y	6.0
0.098033	22.16	74.74	52.58	Y	6.0
0.295084	10.22	49.87	39.65	Y	6.0
0.822331	8.81	37.55	28.74	Y	6.0
3.446072	4.53	22.00	17.47	Y	6.1
13.469532	4.17	22.00	17.83	Y	6.2



China

M/N: AOK-75WiP-NV-L3-00-6570-T5-P-I
Op Cond: ON
Test Spec: Z
Comment: AC 230V/50Hz
Remark: SS-75VP-56DH



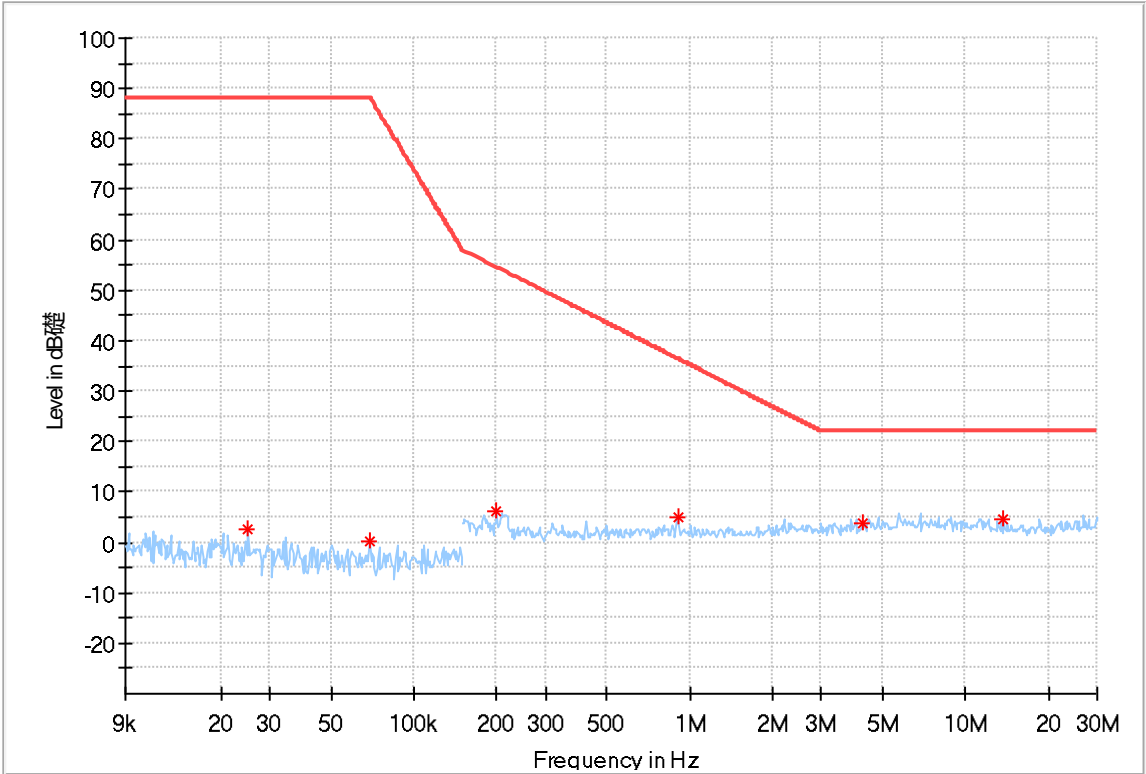
Critical_Freqs

Frequency (MHz)	MaxPeak (dBμA)	Limit (dBμA)	Margin (dB)	Axis	Corr. (dB)
0.073460	5.49	86.10	80.61	Z	6.0
0.098033	24.54	74.74	50.20	Z	6.0
0.196232	9.71	54.77	45.06	Z	6.0
0.292162	11.06	49.99	38.93	Z	6.0
0.822331	7.32	37.55	30.23	Z	6.0
3.214213	4.72	22.00	17.28	Z	6.1
10.714228	5.30	22.00	16.70	Z	6.2



China

M/N: AOK-75WiP-NV-L3-00-6570-T5-P-I
Op Cond: ON
Test Spec: X
Comment: AC 230V/50Hz
Remark: XLG-75-H-AB



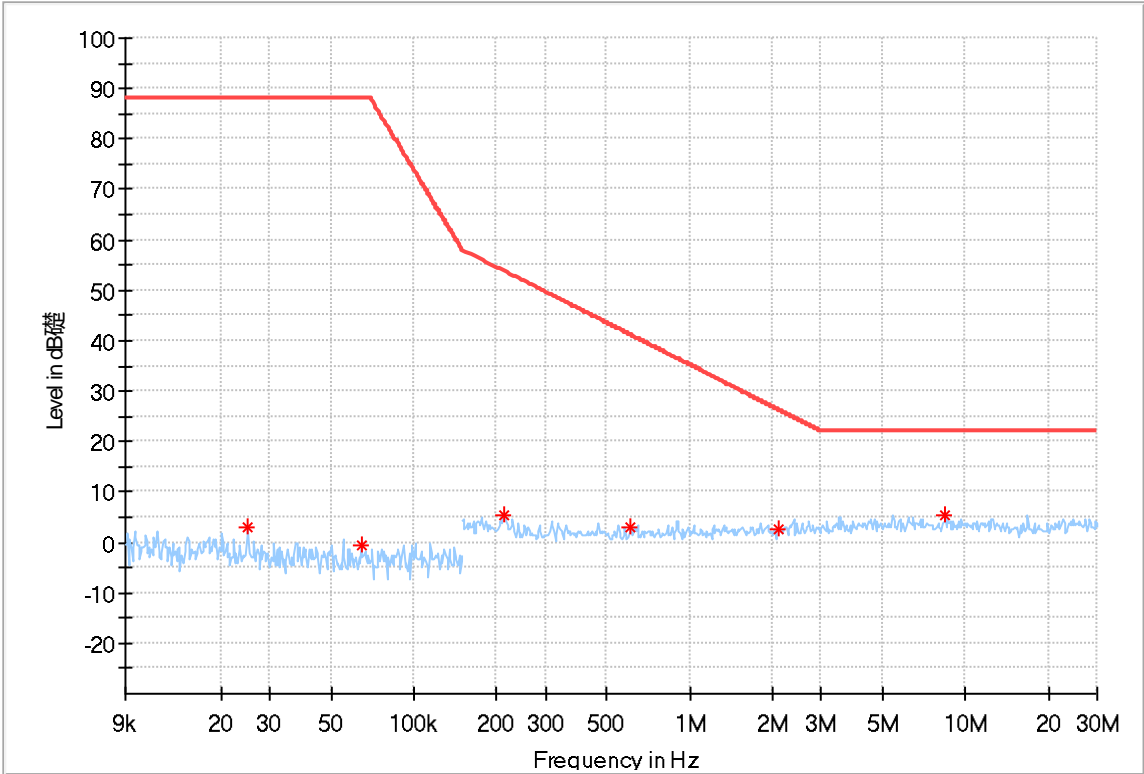
Critical_Freqs

Frequency (MHz)	MaxPeak (dBμA)	Limit (dBμA)	Margin (dB)	Axis	Corr. (dB)
0.025081	2.52	88.00	85.48	X	6.00
0.069203	0.40	88.00	87.60	X	6.00
0.200176	6.22	54.53	48.32	X	6.00
0.908365	5.03	36.36	31.33	X	6.01
4.204862	3.75	22.00	18.25	X	6.01
13.740269	4.62	22.00	17.38	X	6.01



China

M/N: AOK-75WiP-NV-L3-00-6570-T5-P-I
Op Cond: ON
Test Spec: Y
Comment: AC 230V/50Hz
Remark: XLG-75-H-AB



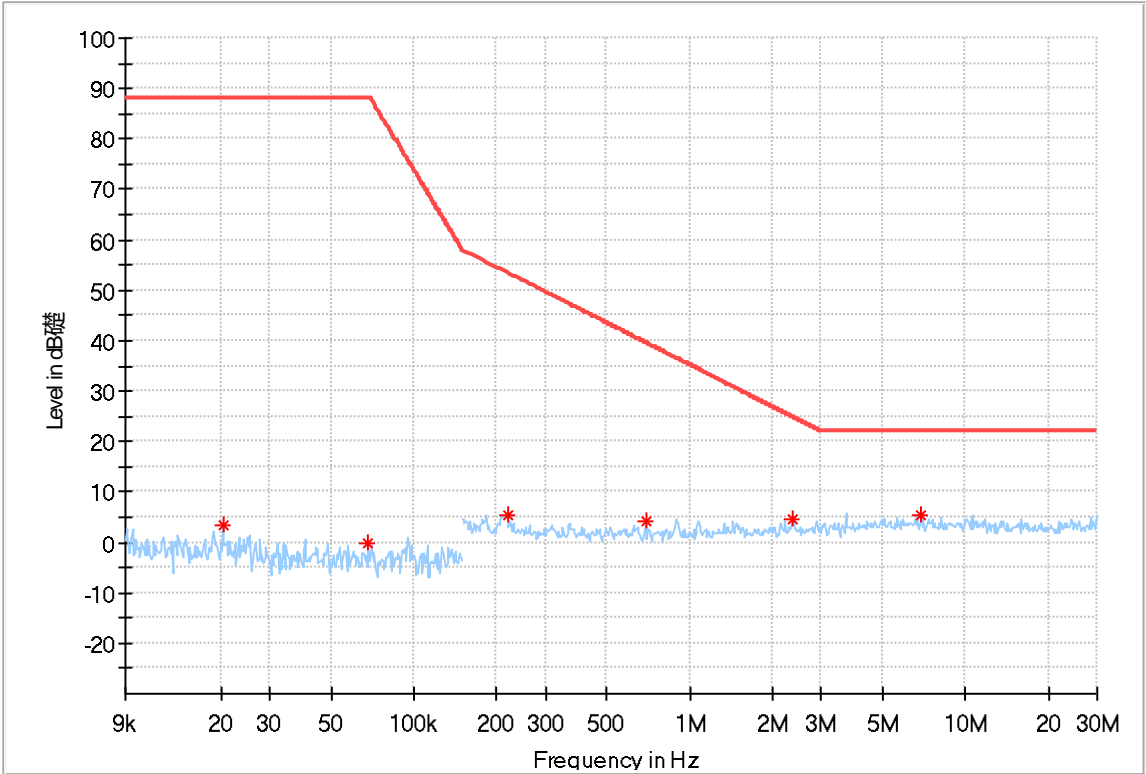
Critical_Freqs

Frequency (MHz)	MaxPeak (dBμA)	Limit (dBμA)	Margin (dB)	Axis	Corr. (dB)
0.025081	3.06	88.00	84.94	Y	6.00
0.064547	-0.49	88.00	88.49	Y	6.00
0.212491	5.51	53.82	48.31	Y	6.00
0.610106	3.12	41.14	38.02	Y	6.01
2.095345	2.79	26.31	23.52	Y	6.01
8.438163	5.28	22.00	16.72	Y	6.01



China

M/N: AOK-75WiP-NV-L3-00-6570-T5-P-I
Op Cond: ON
Test Spec: Z
Comment: AC 230V/50Hz
Remark: XLG-75-H-AB



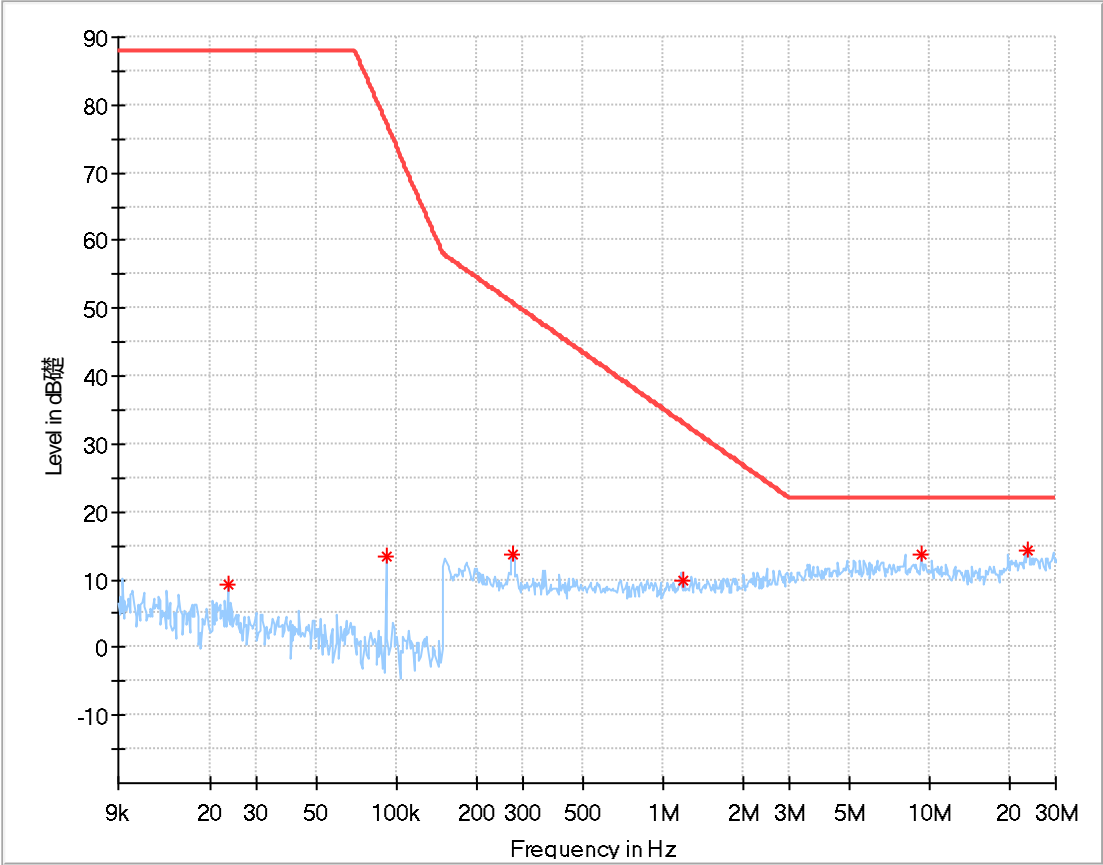
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµA)	Limit (dBµA)	Margin (dB)	Axis	Corr. (dB)
0.020351	3.46	88.00	84.54	Z	6.00
0.068518	-0.15	88.00	88.15	Z	6.00
0.218929	5.43	53.46	48.03	Z	6.00
0.694358	4.06	39.59	35.52	Z	6.01
2.361088	4.57	24.88	20.31	Z	6.01
6.915450	5.19	22.00	16.81	Z	6.01



China

M/N: AOK-120WiP-NV-L3-00-6570-T5-P-I
Op Cond: ON
Test Spec: X
Comment: AC 230V/50Hz
Remark: Xi LP 150W 0.3-1.05A S1 230V 1175

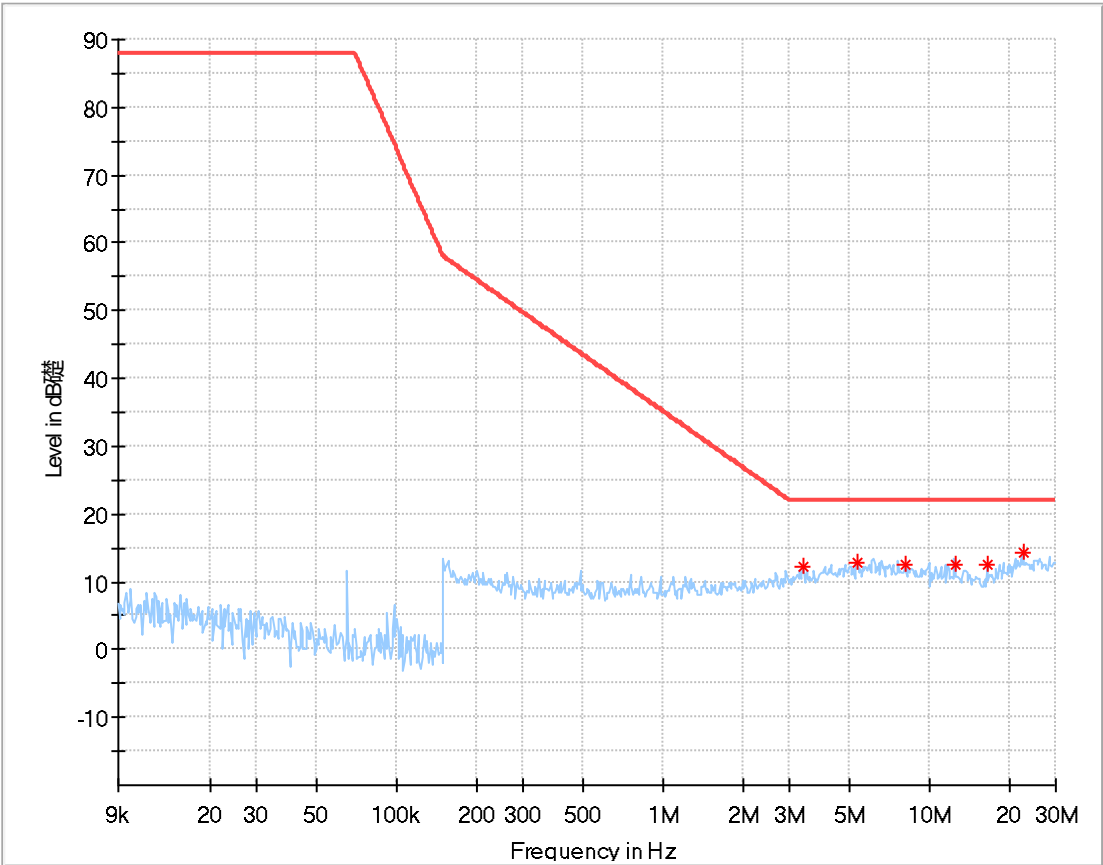


Frequency (MHz)	MaxPeak (dBμA)	Limit (dBμA)	Margin (dB)	Corr. (dB)
0.023162	9.17	88.00	78.83	6.0
0.091437	13.27	77.48	64.21	6.0
0.272505	13.70	50.83	37.13	6.0
1.200214	9.82	33.01	23.19	6.0
9.320982	13.83	22.00	8.17	6.2
23.515241	14.29	22.00	7.71	6.3



China

M/N: AOK-120WiP-NV-L3-00-6570-T5-P-I
Op Cond: ON
Test Spec: Y
Comment: AC 230V/50Hz
Remark: Xi LP 150W 0.3-1.05A S1 230V 1175

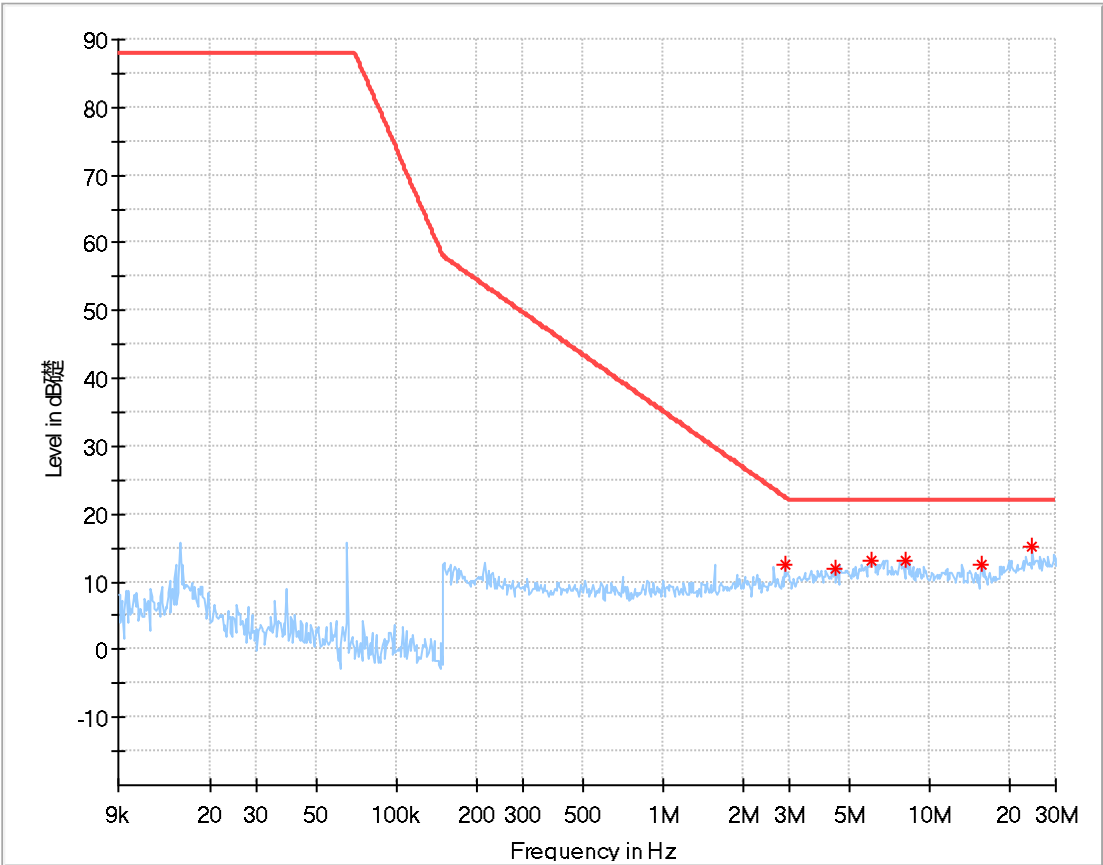


Frequency (MHz)	MaxPeak (dBµA)	Limit (dBµA)	Margin (dB)	Corr. (dB)
3.378170	12.21	22.00	9.79	6.1
5.392450	12.73	22.00	9.27	6.1
8.108909	12.59	22.00	9.41	6.1
12.563275	12.56	22.00	9.44	6.2
16.599742	12.40	22.00	9.60	6.2
22.597684	14.41	22.00	7.59	6.2



China

M/N: AOK-120WiP-NV-L3-00-6570-T5-P-I
Op Cond: ON
Test Spec: Z
Comment: AC 230V/50Hz
Remark: Xi LP 150W 0.3-1.05A S1 230V 1175

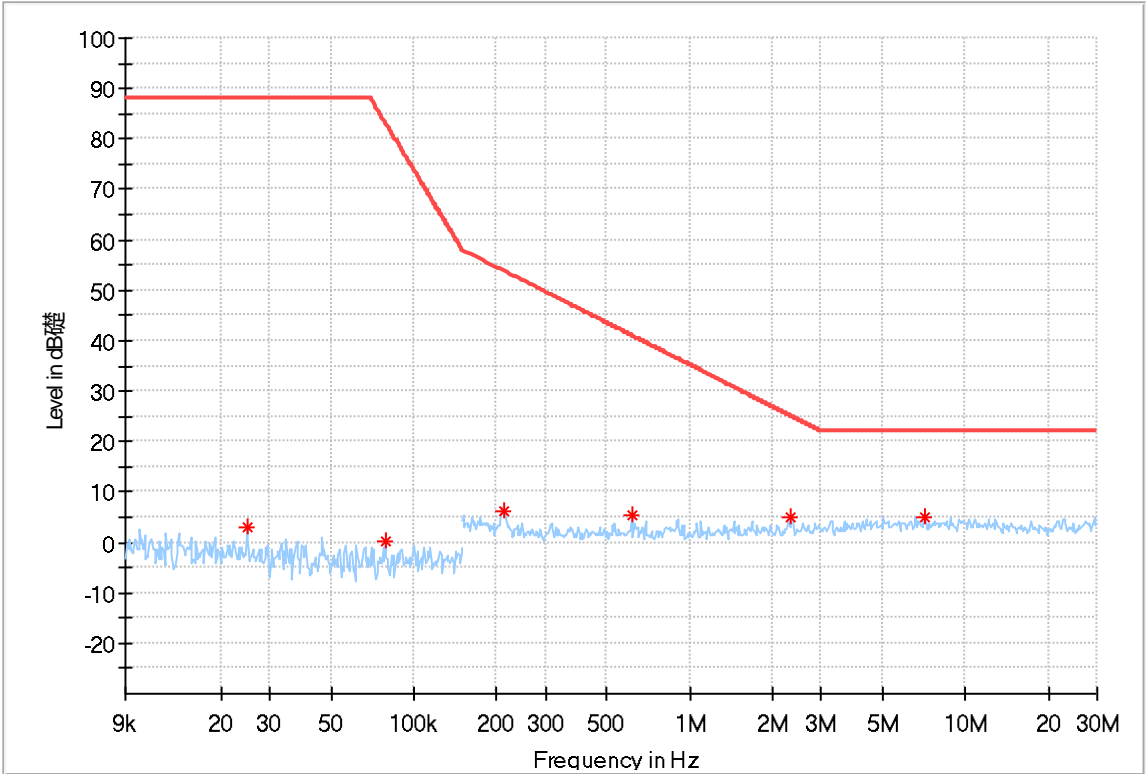


Frequency (MHz)	MaxPeak (dBµA)	Limit (dBµA)	Margin (dB)	Corr. (dB)
2.880975	12.52	22.49	9.96	6.1
4.419352	11.97	22.00	10.03	6.1
6.137111	13.12	22.00	8.88	6.1
8.189998	13.13	22.00	8.87	6.1
15.794085	12.58	22.00	9.42	6.2
24.470054	15.11	22.00	6.89	6.3



China

M/N: AOK-120WiP-NV-L3-00-6570-T5-P-I
Op Cond: ON
Test Spec: X
Comment: AC 230V/50Hz
Remark: XLG-150-H-AB



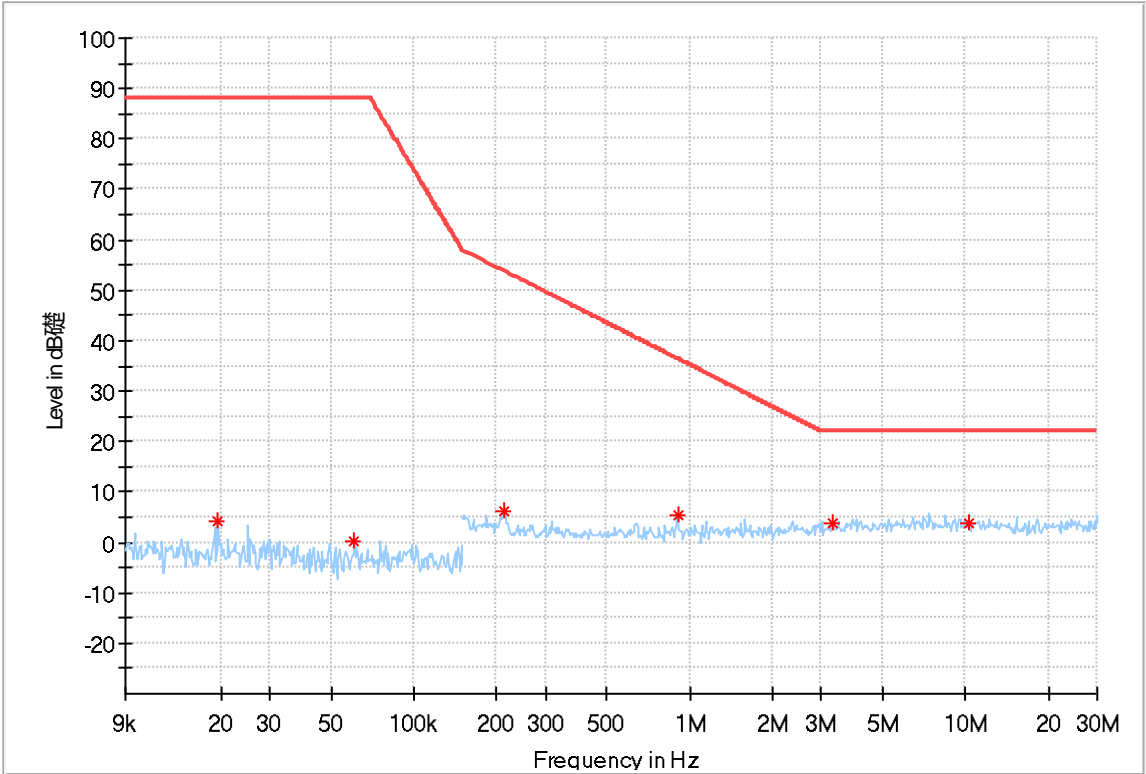
Critical_Freqs

Frequency (MHz)	MaxPeak (dBμA)	Limit (dBμA)	Margin (dB)	Axis	Corr. (dB)
0.024833	3.02	88.00	84.98	X	6.00
0.078759	0.03	83.36	83.33	X	6.00
0.212491	6.18	53.82	47.63	X	6.00
0.616207	5.53	41.02	35.49	X	6.01
2.337710	4.85	25.00	20.14	X	6.01
7.124995	5.15	22.00	16.85	X	6.01



China

M/N: AOK-120WiP-NV-L3-00-6570-T5-P-I
Op Cond: ON
Test Spec: Y
Comment: AC 230V/50Hz
Remark: XLG-150-H-AB



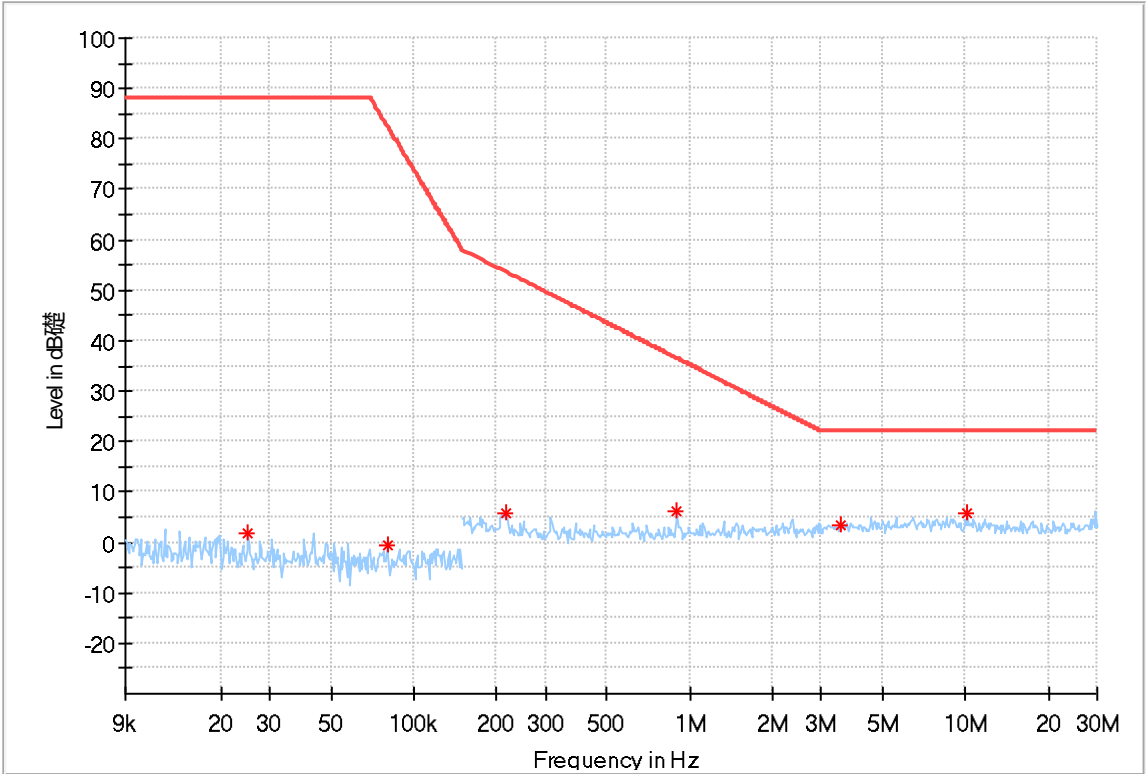
Critical_Freqs

Frequency (MHz)	MaxPeak (dBμA)	Limit (dBμA)	Margin (dB)	Axis	Corr. (dB)
0.019557	4.03	88.00	83.97	Y	6.00
0.060806	0.18	88.00	87.82	Y	6.00
0.212491	6.23	53.82	47.59	Y	6.00
0.908365	5.24	36.36	31.12	Y	6.01
3.278819	3.65	22.00	18.35	Y	6.01
10.296163	3.93	22.00	18.07	Y	6.01



China

M/N: AOK-120WiP-NV-L3-00-6570-T5-P-I
Op Cond: ON
Test Spec: Z
Comment: AC 230V/50Hz
Remark: XLG-150-H-AB



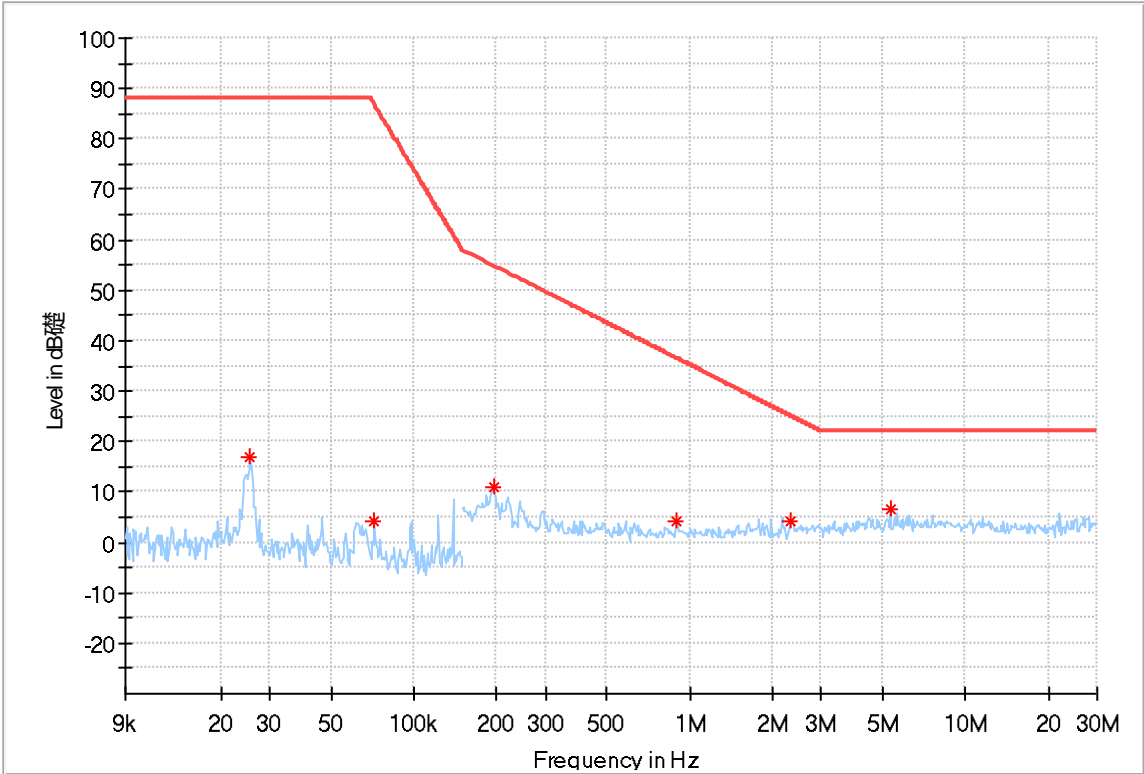
Critical_Freqs

Frequency (MHz)	MaxPeak (dBμA)	Limit (dBμA)	Margin (dB)	Axis	Corr. (dB)
0.025081	1.66	88.00	86.34	Z	6.00
0.080342	-0.54	82.58	83.11	Z	6.00
0.216762	5.93	53.58	47.64	Z	6.00
0.899371	6.13	36.48	30.35	Z	6.01
3.515338	3.32	22.00	18.68	Z	6.01
10.194221	5.77	22.00	16.23	Z	6.01



China

M/N: AOK-50WiPS-NVS-L3-00-6580-T4-A
Op Cond: ON
Test Spec: X
Comment: AC 230V/50Hz
Remark: SS-50VA-56/B



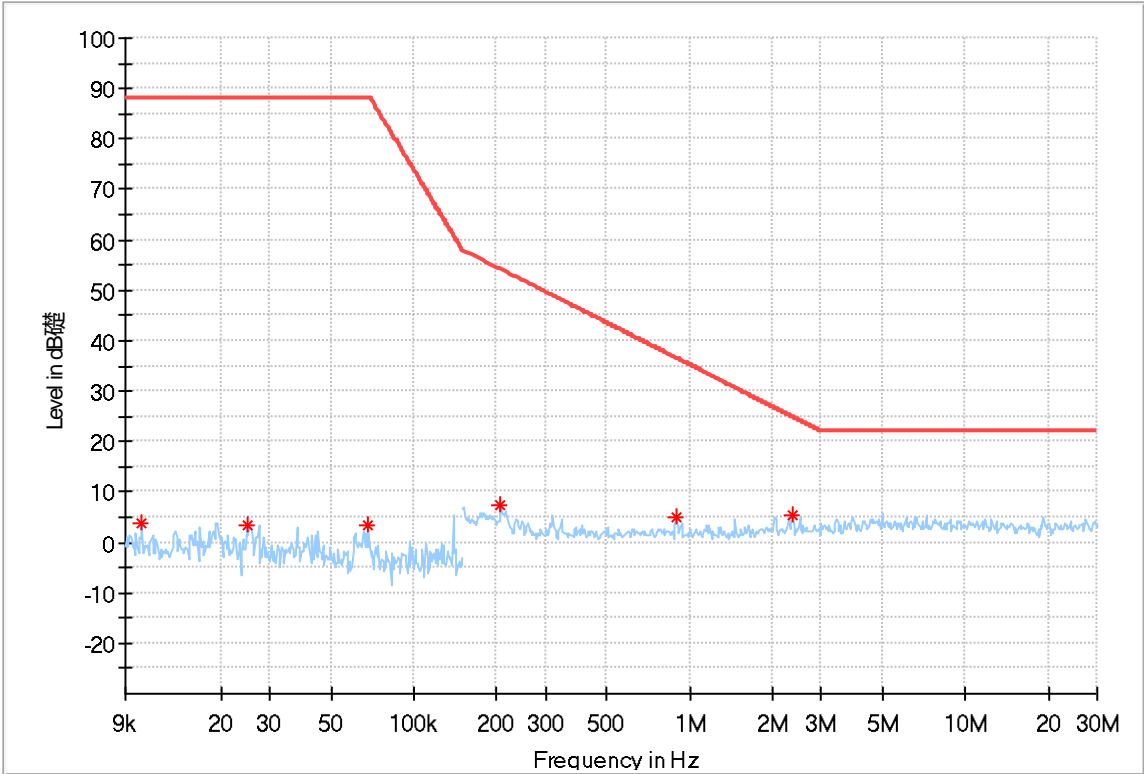
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµA)	Limit (dBµA)	Margin (dB)	Axis	Corr. (dB)
0.025585	16.77	88.00	71.23	X	6.00
0.072013	4.38	86.88	82.50	X	6.00
0.194289	11.09	54.89	43.80	X	6.00
0.899371	4.27	36.48	32.21	X	6.01
2.337710	4.07	25.00	20.92	X	6.01
5.339059	6.50	22.00	15.50	X	6.01



China

M/N: AOK-50WiPS-NVS-L3-00-6580-T4-A
Op Cond: ON
Test Spec: Y
Comment: AC 230V/50Hz
Remark: SS-50VA-56/B



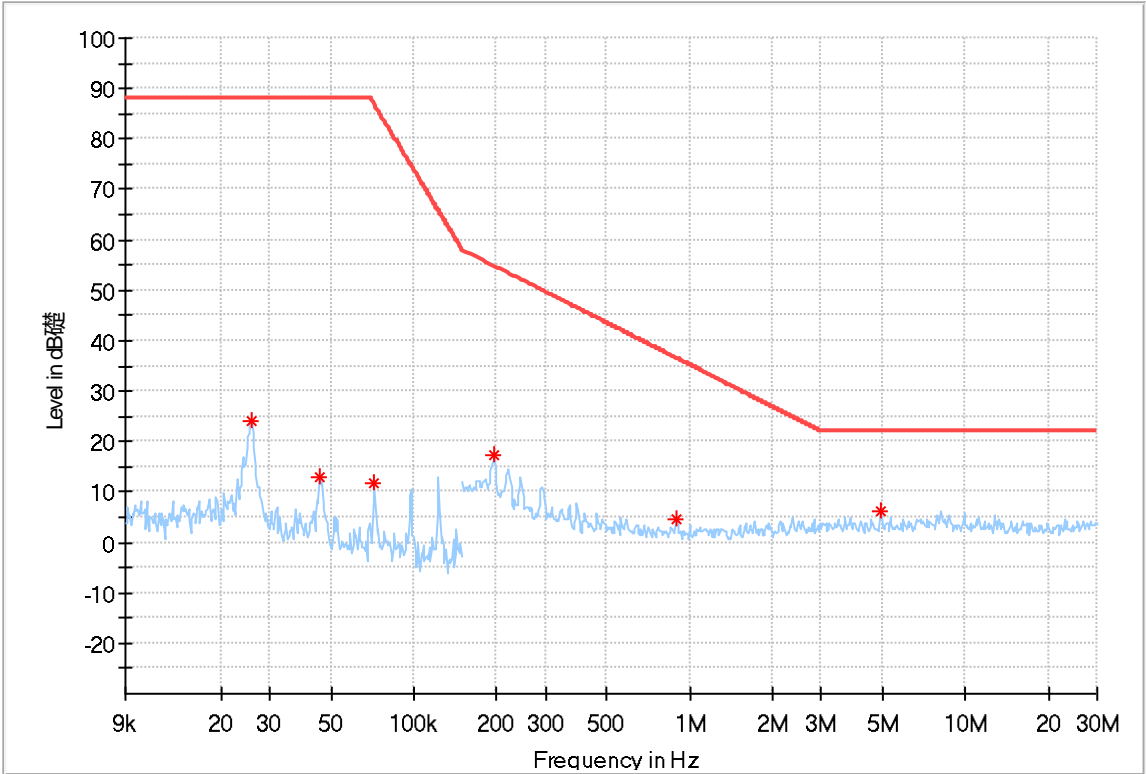
Critical_Freqs

Frequency (MHz)	MaxPeak (dBμA)	Limit (dBμA)	Margin (dB)	Axis	Corr. (dB)
0.010345	3.65	88.00	84.35	Y	6.00
0.024833	3.36	88.00	84.64	Y	6.00
0.068518	3.30	88.00	84.70	Y	6.00
0.206241	7.23	54.17	46.94	Y	6.00
0.890466	5.08	36.60	31.52	Y	6.01
2.361088	5.37	24.88	19.51	Y	6.01



China

M/N: AOK-50WiPS-NVS-L3-00-6580-T4-A
Op Cond: ON
Test Spec: Z
Comment: AC 230V/50Hz
Remark: SS-50VA-56/B



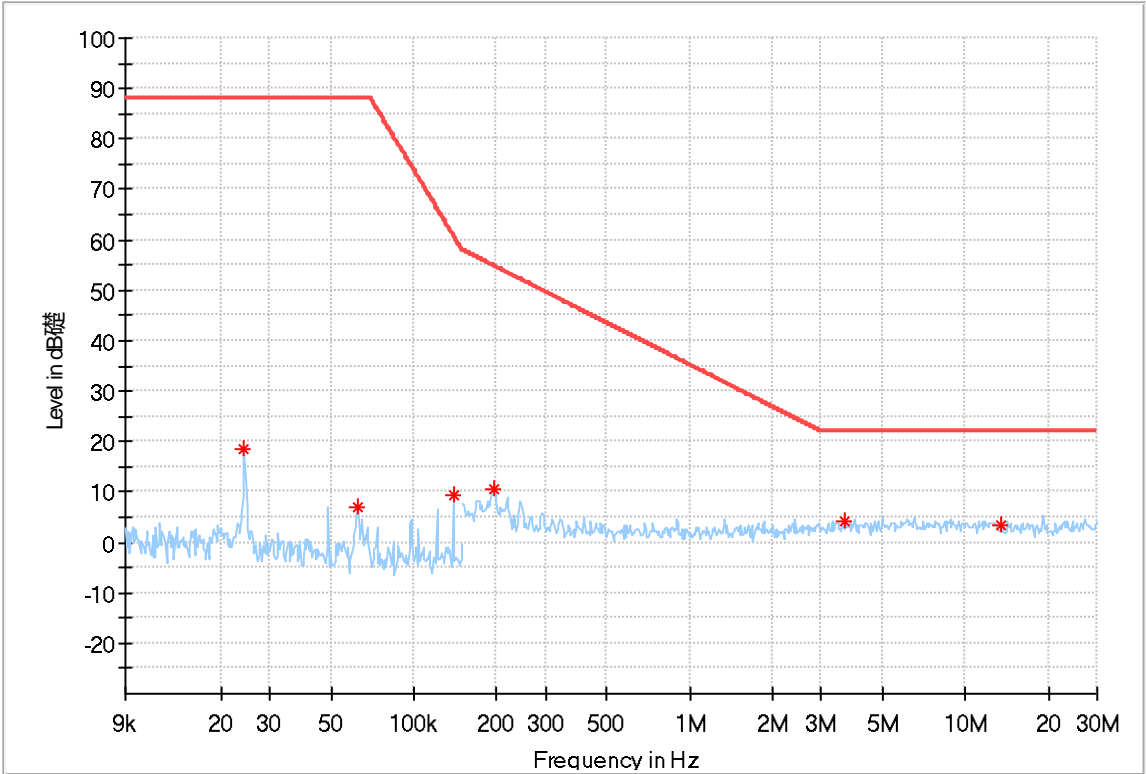
Critical_Freqs

Frequency (MHz)	MaxPeak (dBμA)	Limit (dBμA)	Margin (dB)	Axis	Corr. (dB)
0.025841	24.05	88.00	63.95	Z	6.00
0.045565	13.04	88.00	74.96	Z	6.00
0.072013	11.89	86.88	74.99	Z	6.00
0.196232	17.28	54.77	37.49	Z	6.00
0.899371	4.60	36.48	31.87	Z	6.01
4.930532	6.09	22.00	15.91	Z	6.01



China

M/N: AOK-60WiPS-NVS-L3-00-6580-T4-A
Op Cond: ON
Test Spec: X
Comment: AC 230V/50Hz
Remark: SS-60VA-L50B



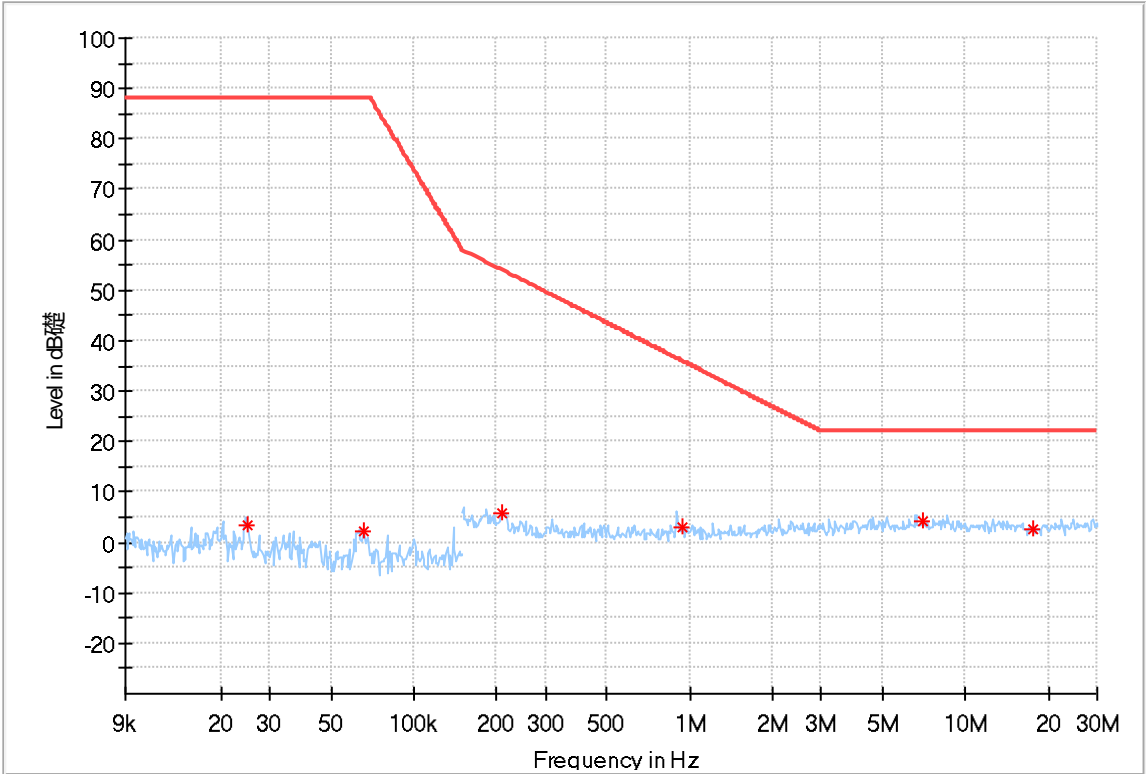
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµA)	Limit (dBµA)	Margin (dB)	Axis	Corr. (dB)
0.024343	18.43	88.00	69.57	X	6.00
0.062649	7.15	88.00	80.85	X	6.00
0.138874	9.18	61.03	51.85	X	6.00
0.196232	10.74	54.77	44.04	X	6.00
3.658074	4.24	22.00	17.76	X	6.01
13.469532	3.26	22.00	18.74	X	6.01



China

M/N: AOK-60WiPS-NVS-L3-00-6580-T4-A
Op Cond: ON
Test Spec: Y
Comment: AC 230V/50Hz
Remark: SS-60VA-L50B



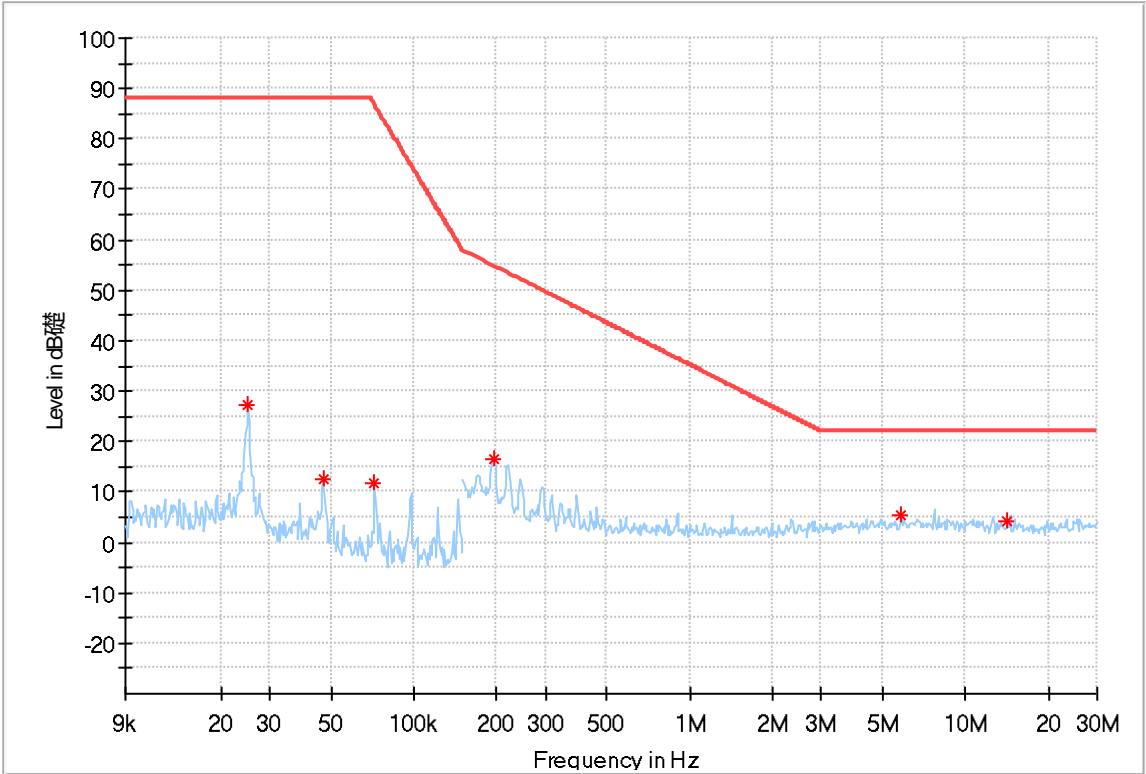
Critical_Freqs

Frequency (MHz)	MaxPeak (dBμA)	Limit (dBμA)	Margin (dB)	Axis	Corr. (dB)
0.025081	3.33	88.00	84.67	Y	6.00
0.065844	2.08	88.00	85.92	Y	6.00
0.210387	5.59	53.93	48.35	Y	6.00
0.935889	3.02	36.00	32.98	Y	6.01
7.054451	4.25	22.00	17.75	Y	6.01
17.620961	2.51	22.00	19.49	Y	6.01



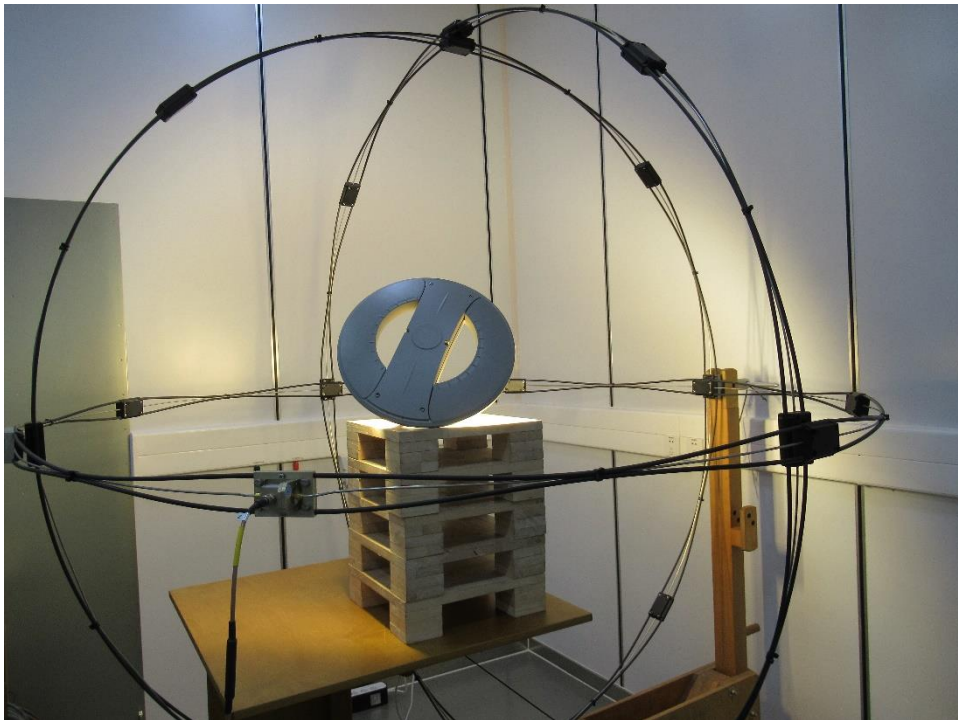
China

M/N: AOK-60WiPS-NVS-L3-00-6580-T4-A
Op Cond: ON
Test Spec: Z
Comment: AC 230V/50Hz
Remark: SS-60VA-L50B



Critical_Freqs

Frequency (MHz)	MaxPeak (dBμA)	Limit (dBμA)	Margin (dB)	Axis	Corr. (dB)
0.025081	27.33	88.00	60.67	Z	6.00
0.046945	12.42	88.00	75.58	Z	6.00
0.072013	11.69	86.88	75.19	Z	6.00
0.196232	16.60	54.77	38.17	Z	6.00
5.839250	5.51	22.00	16.49	Z	6.01
14.156613	4.34	22.00	17.66	Z	6.01



Test Setup

2.2.8 Test Location

This test was carried out in conducted emission shielded room.

2.3 Radiated Disturbance

2.3.1 Specification Reference

EN IEC 55015:2019/A11:2020, Clause 4.5.3

2.3.2 Equipment Under Test

AOK-50WiP-NV-L3-00-6570-T5-P-I, AOK-75WiP-NV-L3-00-6570-T5-P-I,
AOK-120WiP-NV-L3-00-6570-T5-P-I, AOK-50WiPS-NVS-L3-00-6580-T4-A,
AOK-60WiPS-NVS-L3-00-6580-T4-A

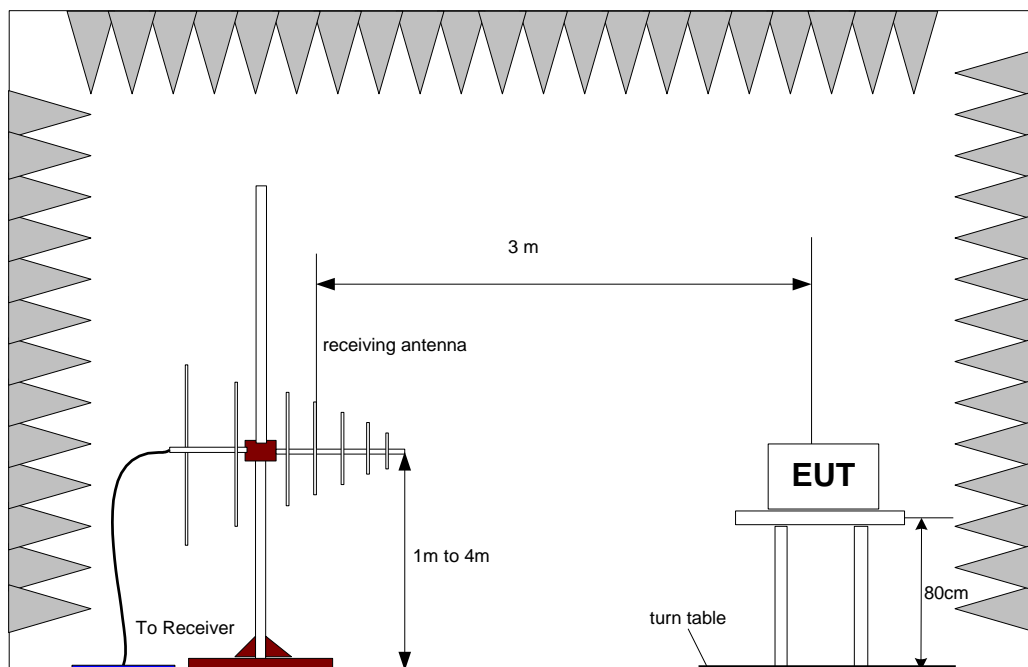
2.3.3 Date of Test

2019-01-07; 2020-01-16; 2020-04-08, 2022-05-22

2.3.4 Test Method

The EUT was set up in a semi-anechoic chamber on a remotely controlled turntable and placed on a non-conductive. Guidance on how to arrange the luminaire during the measurements can be found in Annex C.

A prescan of the EUT emissions profile was made while varying the antenna-to-EUT azimuth and antenna-to-EUT polarization using a peak detector; measurements were taken at a 3m distance. Using the prescan list of the highest emissions detected, their bearing and associated antenna polarization, the EUT was then formally measured using a Quasi-Peak detector. The readings were maximized by adjusting the antenna height, polarization and turntable azimuth, in accordance with the specification.





China

2.3.5 Environmental Conditions

Ambient Temperature 23.4 °C
Relative Humidity 46.7 %
Atmospheric Pressure 1015.0 mbar

2.3.6 Specification Limits

Radiated disturbance limits in the frequency range 30MHz to 1000MHz at a measuring distance of 3 m	
Frequency range MHz	Quasi-peak limits dB(μV/m)
30 to 230	40
230 to 1000	47

Remark :

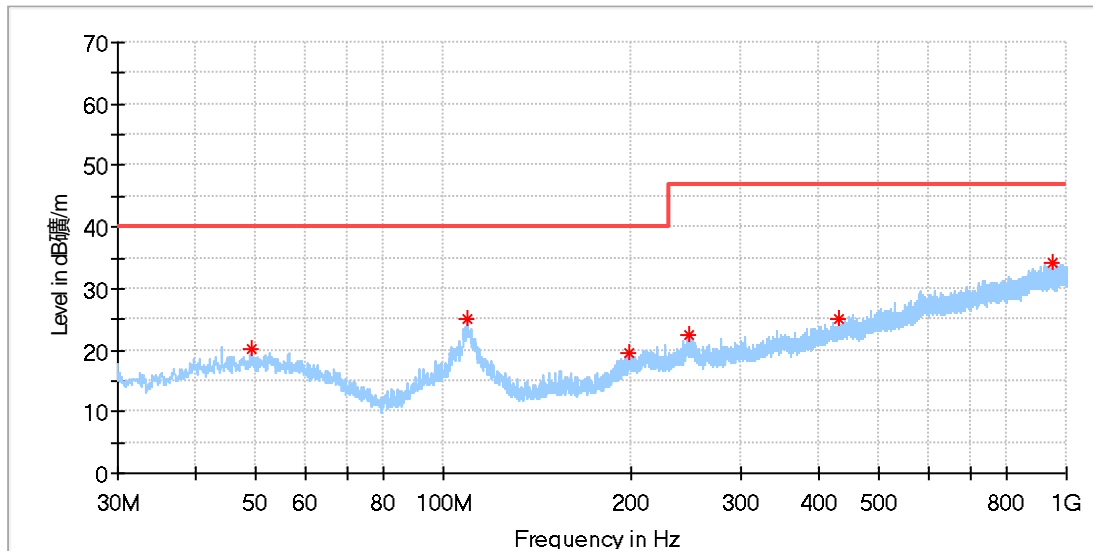
Level=Reading Level + Correction Factor

Correction Factor=Antenna Factor + Cable Loss

(The Reading Level is recorded by software which is not shown in the sheet)

2.3.7 Test Results

M/N: AOK-50WiP-NV-L3-00-6570-T5-P-I
 Op Cond: ON
 Comment: AC 230V/50Hz
 Test Spec: Horizontal
 Remark: XLG-50-AB



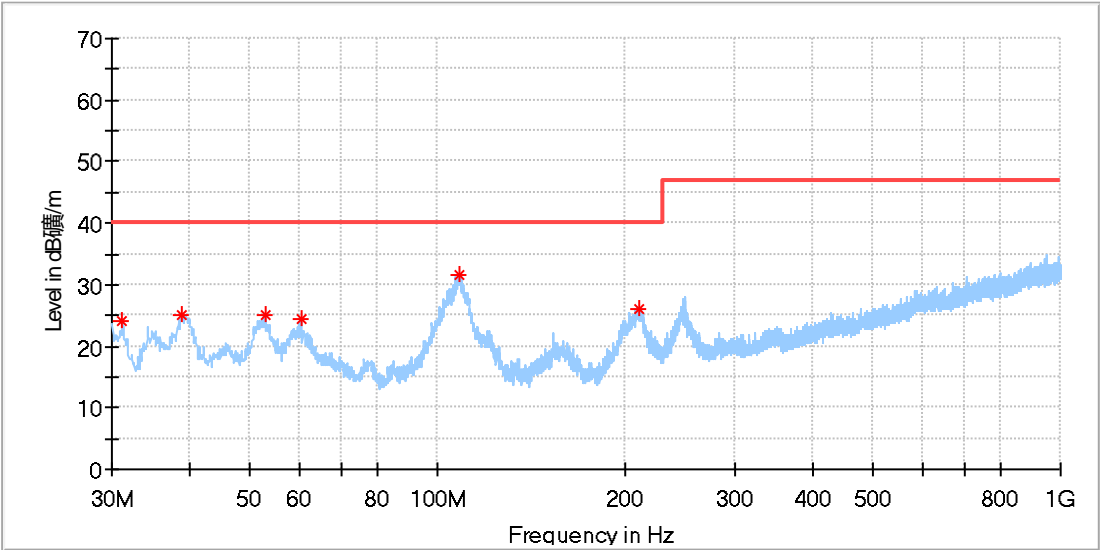
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
49.157500	20.24	40.00	19.76	100.0	H	0.0	20.94
108.933750	24.99	40.00	15.01	200.0	H	176.0	18.88
197.870625	19.43	40.00	20.57	100.0	H	0.0	19.61
248.371250	22.34	47.00	24.66	100.0	H	0.0	20.61
430.610000	25.05	47.00	21.95	200.0	H	0.0	24.89
947.438125	34.08	47.00	12.92	100.0	H	0.0	32.72



China

M/N: AOK-50WiP-NV-L3-00-6570-T5-P-I
Op Cond: ON
Comment: AC 230V/50Hz
Test Spec: Vertical
Remark: XLG-50-AB



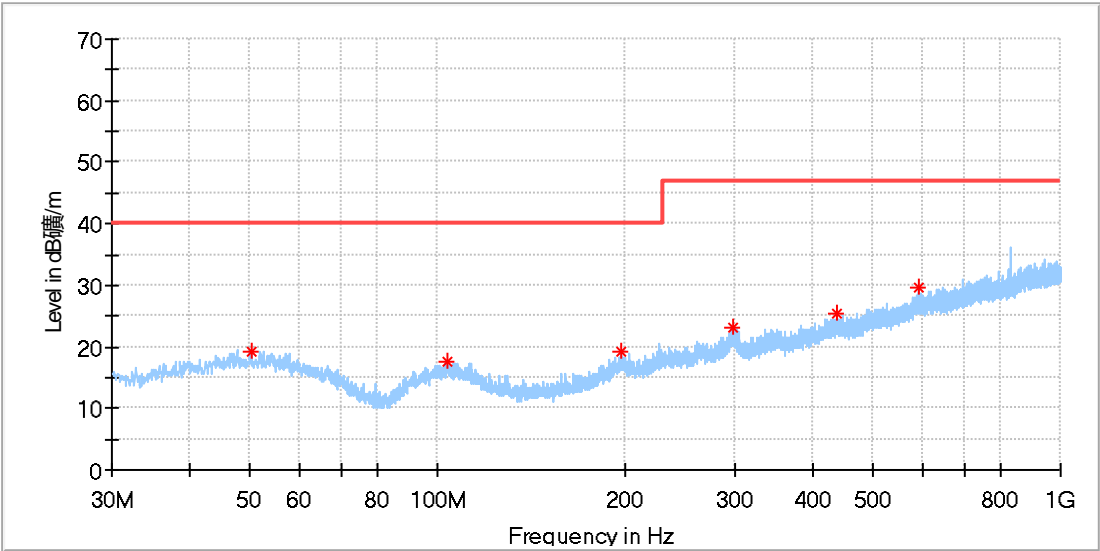
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
31.212500	24.02	40.00	15.98	100.0	V	120.0	17.13
38.911875	25.20	40.00	14.80	100.0	V	314.0	19.10
52.795000	25.09	40.00	14.91	100.0	V	314.0	20.94
60.312500	24.50	40.00	15.50	100.0	V	0.0	19.76
108.509375	31.71	40.00	8.29	100.0	V	266.0	18.89
211.026250	26.09	40.00	13.91	100.0	V	209.0	18.76



China

M/N: AOK-50WiP-NV-L3-00-6570-T5-P-I
Op Cond: ON
Comment: AC 230V/50Hz
Test Spec: Horizontal
Remark: SS-50VP-56DH



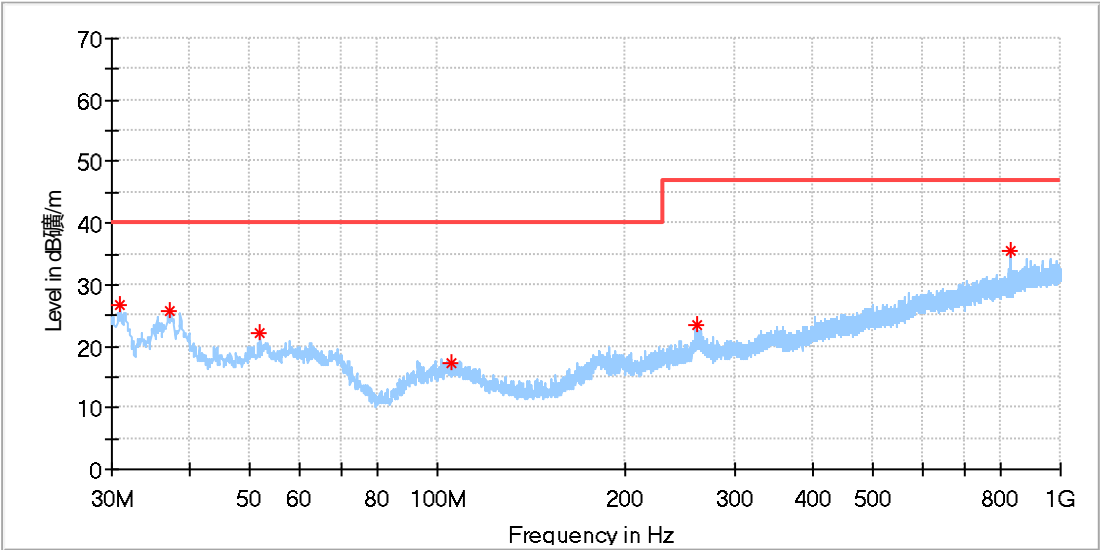
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
50.127500	19.33	40.00	20.67	200.0	H	262.0	21.01
103.598750	17.56	40.00	22.44	200.0	H	311.0	19.39
196.718750	19.19	40.00	20.81	200.0	H	234.0	19.41
298.508125	23.10	47.00	23.90	100.0	H	288.0	21.64
436.005625	25.40	47.00	21.60	100.0	H	0.0	25.11
591.993750	29.55	47.00	17.45	200.0	H	11.0	28.37



China

M/N: AOK-50WiP-NV-L3-00-6570-T5-P-I
Op Cond: ON
Comment: AC 230V/50Hz
Test Spec: Vertical
Remark: SS-50VP-56DH



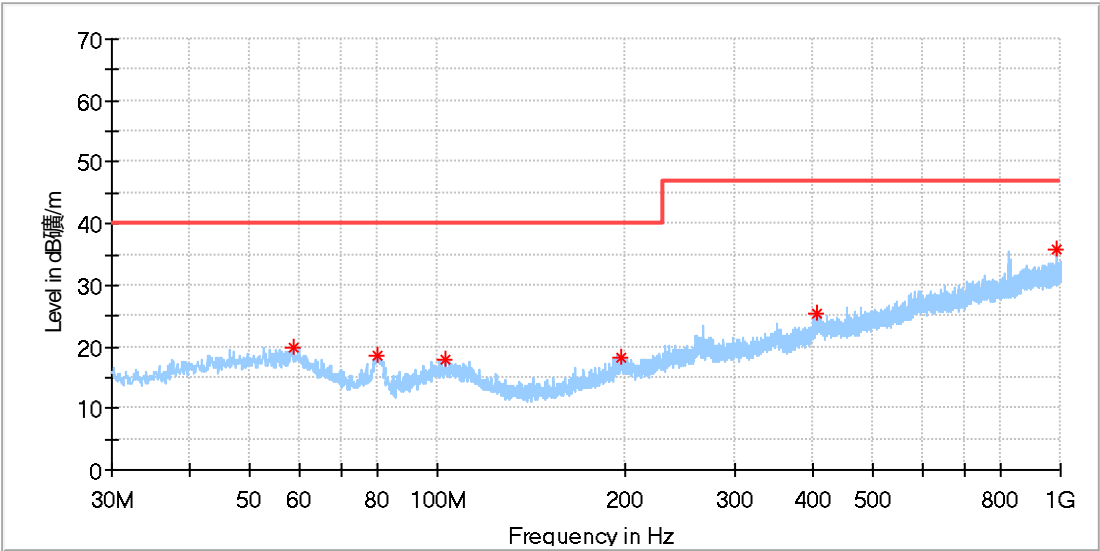
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
30.909375	26.66	40.00	13.34	100.0	V	0.0	17.15
37.214375	25.73	40.00	14.27	100.0	V	10.0	18.57
51.885625	21.98	40.00	18.02	100.0	V	0.0	20.90
104.932500	17.40	40.00	22.60	100.0	V	165.0	19.25
260.071875	23.48	47.00	23.52	100.0	V	80.0	20.61
830.735000	35.61	47.00	11.39	200.0	V	1.0	31.04



China

M/N: AOK-75WiP-NV-L3-00-6570-T5-P-I
Op Cond: ON
Comment: AC 230V/50Hz
Test Spec: Horizontal
Remark: XLG-75-H-AB



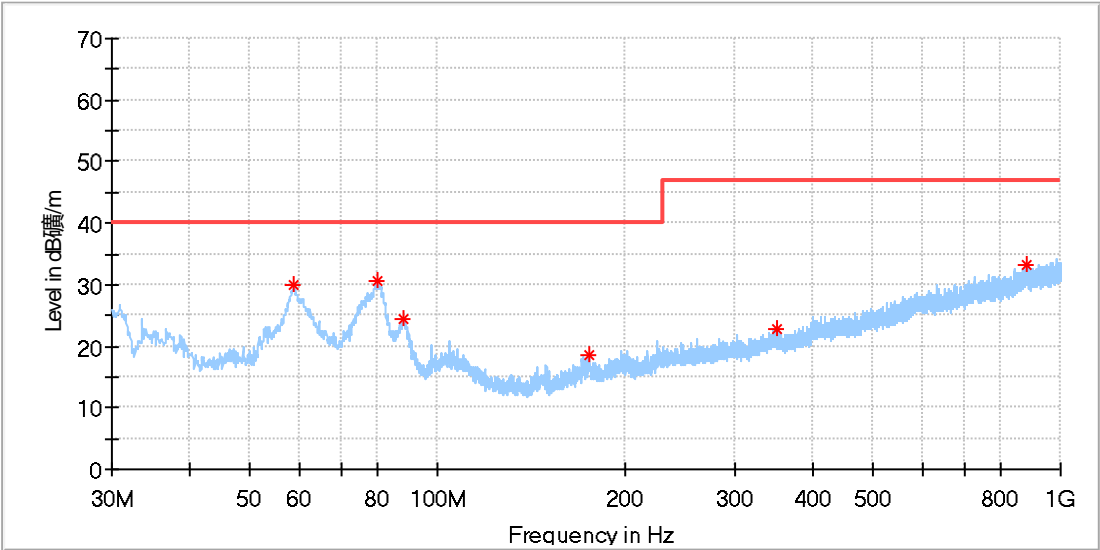
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
58.736250	19.95	40.00	20.05	100.0	H	81.0	20.18
80.136875	18.70	40.00	21.30	200.0	H	0.0	14.29
103.113750	17.86	40.00	22.14	200.0	H	0.0	19.42
196.536875	18.17	40.00	21.83	200.0	H	355.0	19.39
406.238750	25.26	47.00	21.74	100.0	H	52.0	24.32
983.873750	35.95	47.00	11.05	200.0	H	0.0	32.90



China

M/N: AOK-75WiP-NV-L3-00-6570-T5-P-I
Op Cond: ON
Comment: AC 230V/50Hz
Test Spec: Vertical
Remark: XLG-75-H-AB



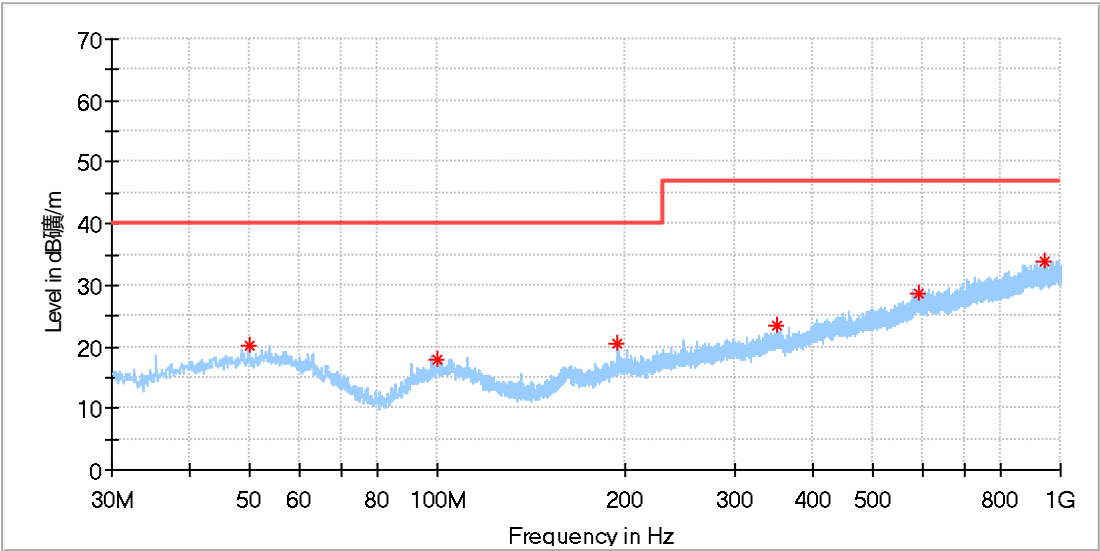
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
58.857500	29.80	40.00	10.20	100.0	V	277.0	20.15
80.197500	30.50	40.00	9.50	200.0	V	0.0	14.29
88.078750	24.50	40.00	15.50	100.0	V	355.0	16.14
175.257500	18.55	40.00	21.45	100.0	V	259.0	16.73
351.130625	22.95	47.00	24.05	100.0	V	0.0	23.54
884.570000	33.16	47.00	13.84	200.0	V	173.0	32.18



China

M/N: AOK-75WiP-NV-L3-00-6570-T5-P-I
Op Cond: ON
Comment: AC 230V/50Hz
Test Spec: Horizontal
Remark: Xi LP 100W 0.3-1.05A S1 230V 1175



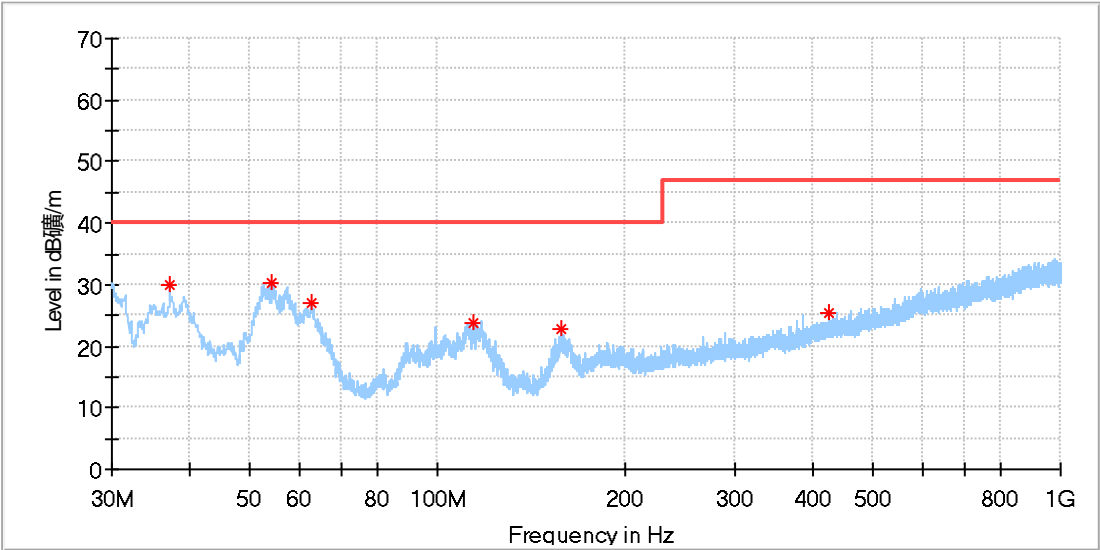
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
49.763750	20.03	40.00	19.97	100.0	H	191.0	21.01
100.021875	17.78	40.00	22.22	200.0	H	273.0	19.07
194.900000	20.54	40.00	19.46	100.0	H	163.0	19.01
349.554375	23.40	47.00	23.60	200.0	H	292.0	23.48
589.932500	28.63	47.00	18.37	100.0	H	277.0	28.28
942.830625	33.95	47.00	13.05	200.0	H	0.0	32.73



China

M/N: AOK-75WiP-NV-L3-00-6570-T5-P-I
Op Cond: ON
Comment: AC 230V/50Hz
Test Spec: Vertical
Remark: Xi LP 100W 0.3-1.05A S1 230V 1175



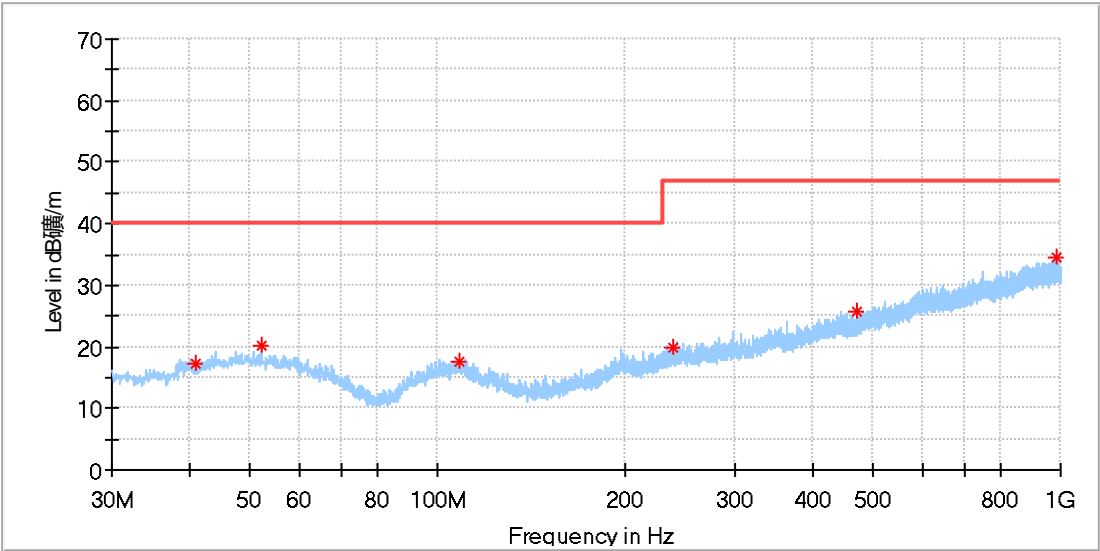
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
37.214375	29.87	40.00	10.13	100.0	V	9.0	18.57
54.128750	30.29	40.00	9.71	100.0	V	278.0	20.89
62.555625	26.92	40.00	13.08	100.0	V	278.0	19.41
113.965625	23.81	40.00	16.19	100.0	V	260.0	18.20
157.979375	22.93	40.00	17.07	100.0	V	156.0	16.09
425.275000	25.36	47.00	21.64	200.0	V	0.0	24.88



China

M/N: AOK-75WiP-NV-L3-00-6570-T5-P-I
Op Cond: ON
Comment: AC 230V/50Hz
Test Spec: Horizontal
Remark: SS-75VP-56DH



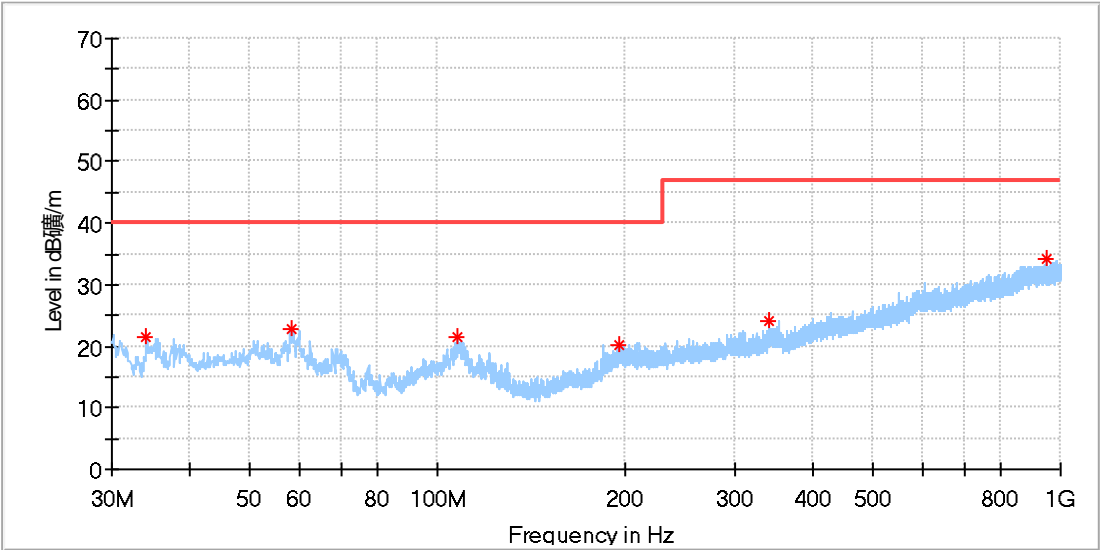
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
40.973125	17.35	40.00	22.65	100.0	H	105.0	19.87
52.188750	20.02	40.00	19.98	100.0	H	0.0	20.91
108.206250	17.64	40.00	22.36	200.0	H	13.0	18.90
238.186250	19.84	47.00	27.16	100.0	H	245.0	20.29
470.865000	25.57	47.00	21.43	200.0	H	339.0	25.35
984.722500	34.40	47.00	12.60	200.0	H	184.0	32.92



China

M/N: AOK-75WiP-NV-L3-00-6570-T5-P-I
Op Cond: ON
Comment: AC 230V/50Hz
Test Spec: Vertical
Remark: SS-75VP-56DH



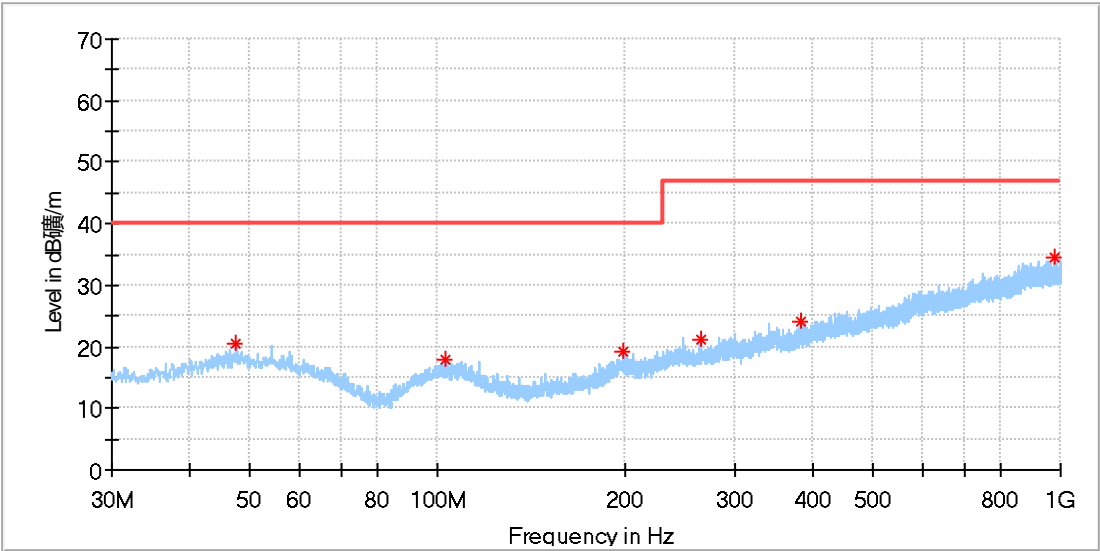
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
34.122500	21.50	40.00	18.50	100.0	V	176.0	17.35
58.493750	22.87	40.00	17.13	100.0	V	21.0	20.25
107.600000	21.46	40.00	18.54	100.0	V	195.0	19.00
194.960625	20.34	40.00	19.66	100.0	V	0.0	19.03
341.370000	24.01	47.00	22.99	100.0	V	49.0	23.14
948.650625	34.15	47.00	12.85	200.0	V	6.0	32.68



China

M/N: AOK-120WiP-NV-L3-00-6570-T5-P-I
Op Cond: ON
Comment: AC 230V/50Hz
Test Spec: Horizontal
Remark: XLG-150-H-AB



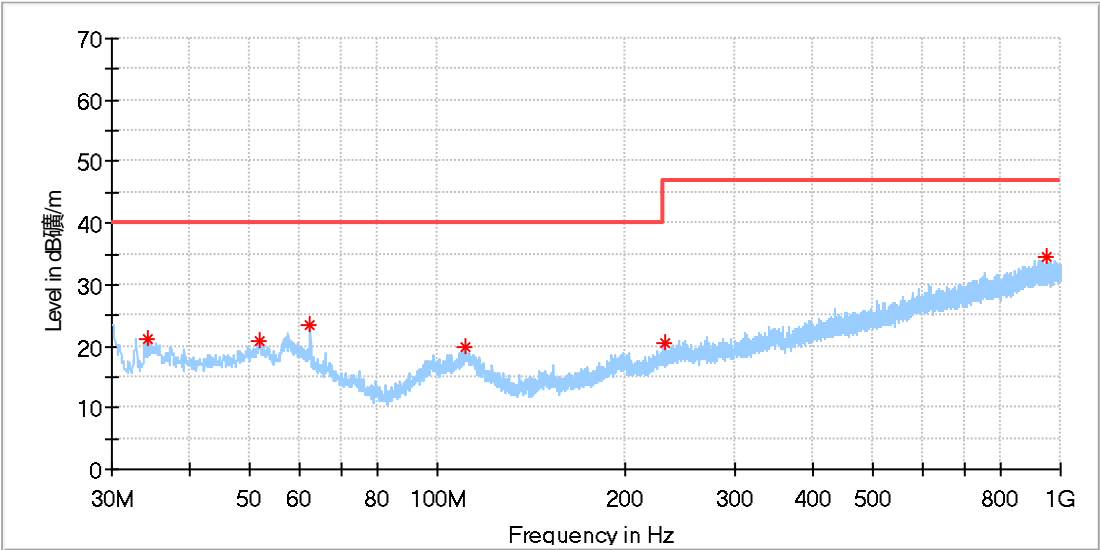
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
47.581250	20.39	40.00	19.61	100.0	H	194.0	20.75
102.931875	17.83	40.00	22.17	200.0	H	166.0	19.42
198.234375	19.06	40.00	20.94	100.0	H	175.0	19.61
265.164375	21.11	47.00	25.89	200.0	H	139.0	20.88
383.322500	24.17	47.00	22.83	100.0	H	305.0	23.54
979.326875	34.56	47.00	12.44	100.0	H	0.0	32.80



China

M/N: AOK-120WiP-NV-L3-00-6570-T5-P-I
Op Cond: ON
Comment: AC 230V/50Hz
Test Spec: Vertical
Remark: XLG-150-H-AB



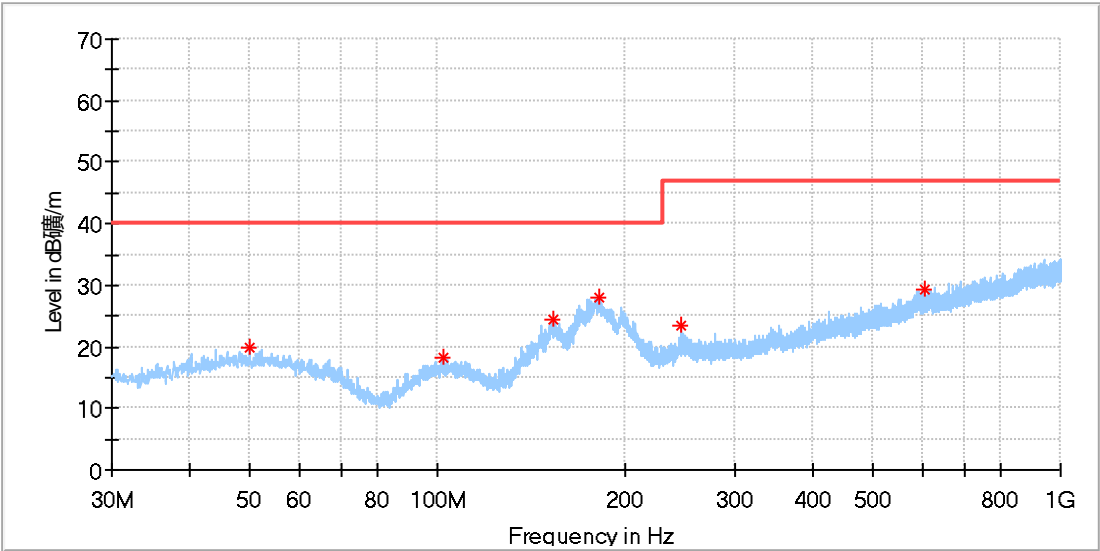
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
34.183125	21.13	40.00	18.87	200.0	V	321.0	17.38
51.825000	20.82	40.00	19.18	100.0	V	0.0	20.91
62.495000	23.41	40.00	16.59	100.0	V	353.0	19.42
110.752500	19.90	40.00	20.10	100.0	V	224.0	18.81
231.153750	20.42	47.00	26.58	100.0	V	359.0	19.95
948.044375	34.49	47.00	12.51	100.0	V	61.0	32.70



China

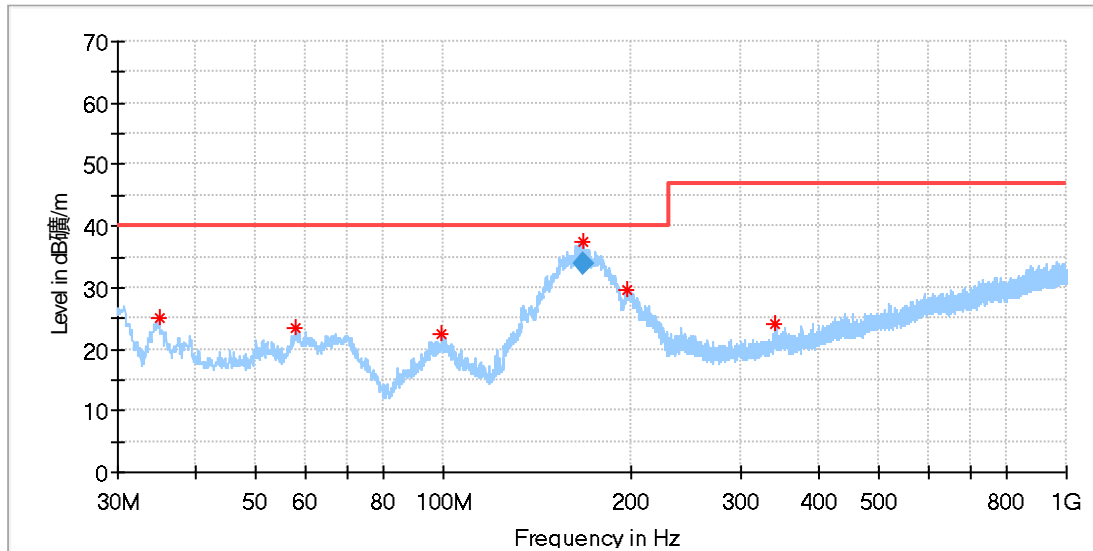
M/N: AOK-120WiP-NV-L3-00-6570-T5-P-I
Op Cond: ON
Comment: AC 230V/50Hz
Test Spec: Horizontal
Remark: Xi LP 150W 0.3-1.05A S1 230V 1175



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
49.885000	20.00	40.00	20.00	200.0	H	8.0	21.02
102.143750	18.27	40.00	21.73	200.0	H	163.0	19.34
153.856875	24.41	40.00	15.59	200.0	H	331.0	15.72
182.290000	27.94	40.00	12.06	200.0	H	0.0	17.30
246.552500	23.43	47.00	23.57	100.0	H	204.0	20.56
603.209375	29.14	47.00	17.86	200.0	H	0.0	28.59

M/N: AOK-120WiP-NV-L3-00-6570-T5-P-I
 Op Cond: ON
 Comment: AC 230V/50Hz
 Test Spec: Vertical
 Remark: Xi LP 150W 0.3-1.05A S1 230V 1175



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
34.910625	25.05	40.00	14.95	100.0	V	286.0	17.66
57.948125	23.38	40.00	16.62	100.0	V	286.0	20.37
99.355000	22.39	40.00	17.61	100.0	V	0.0	19.09
167.436875	37.53	40.00	2.47	100.0	V	286.0	16.49
197.628125	29.55	40.00	10.45	100.0	V	220.0	19.56
340.400000	24.21	47.00	22.79	200.0	V	48.0	23.06

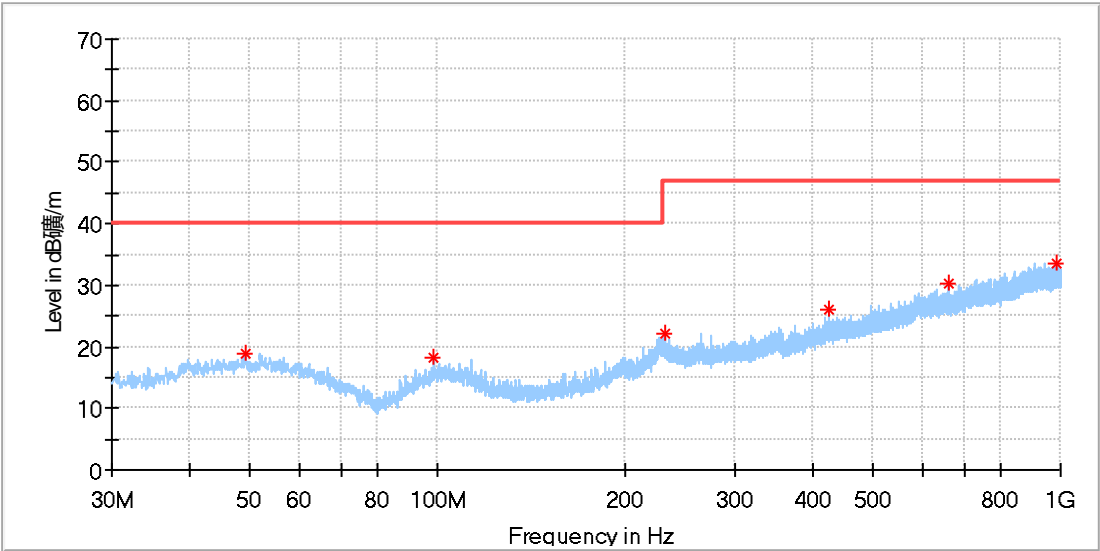
Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
167.436875	33.89	40.00	6.11	100.0	V	286.0	16.49



China

M/N: AOK-50WiPS-NVS-L3-00-6580-T4-A
Op Cond: ON
Comment: AC 230V/50Hz
Test Spec: Horizontal
Remark: SS-50VA-56/B



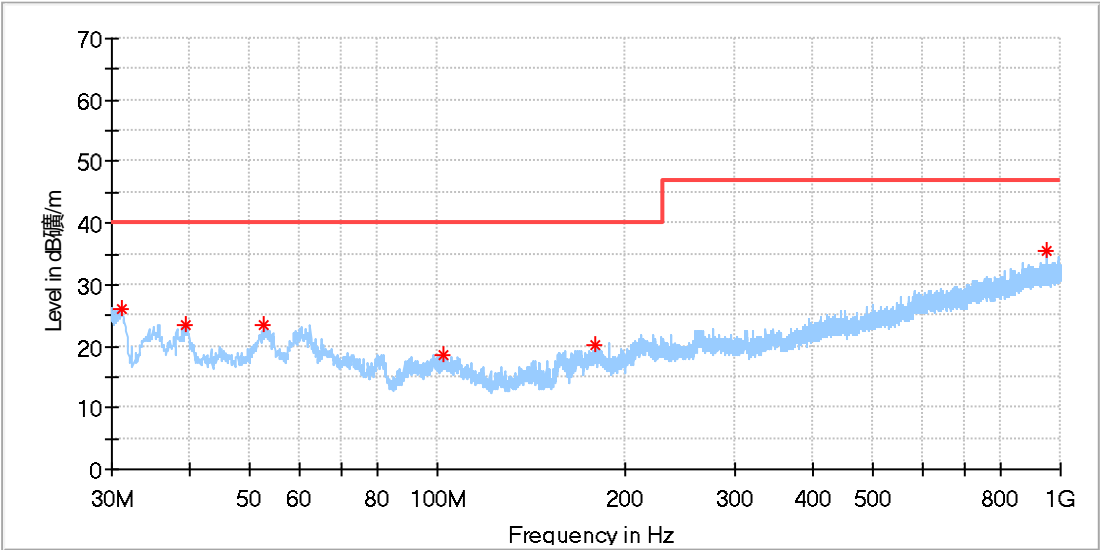
Critical_Freqs

Frequency (MHz)	MaxPeak (dB/m)	Limit (dB/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
49.157500	19.04	40.00	20.96	200.0	H	21.0	20.94
98.809375	18.09	40.00	21.91	200.0	H	177.0	19.06
231.396250	22.00	47.00	25.00	200.0	H	94.0	19.96
423.456250	26.03	47.00	20.97	200.0	H	0.0	24.87
661.288125	30.14	47.00	16.86	200.0	H	0.0	29.04
984.904375	33.58	47.00	13.42	200.0	H	149.0	32.93



China

M/N: AOK-50WiPS-NVS-L3-00-6580-T4-A
Op Cond: ON
Comment: AC 230V/50Hz
Test Spec: Vertical
Remark: SS-50VA-56/B



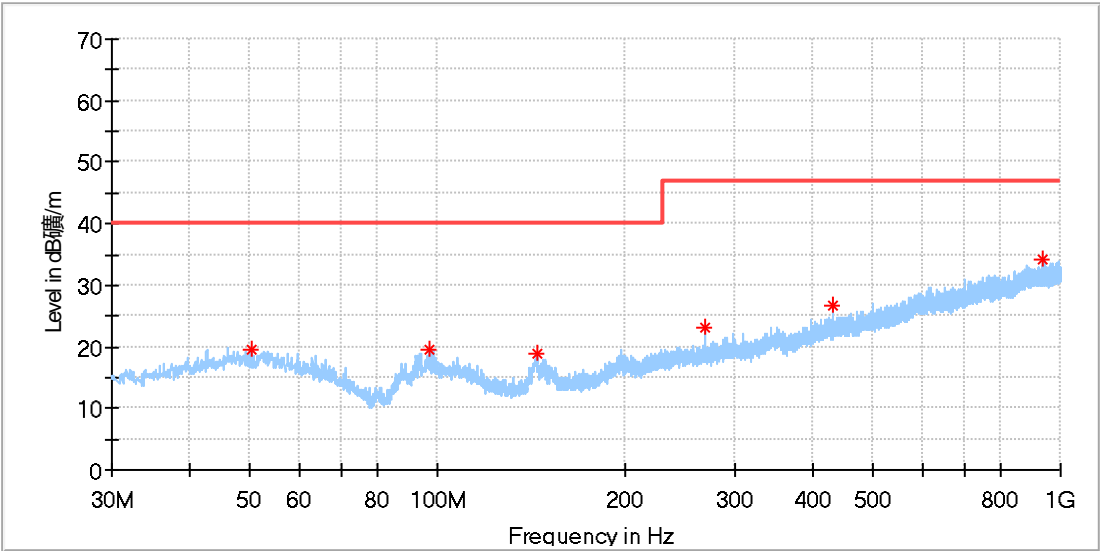
Critical_Freqs

Frequency (MHz)	MaxPeak (dB/m)	Limit (dB/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
31.091250	26.14	40.00	13.86	100.0	V	313.0	17.12
39.518125	23.40	40.00	16.60	100.0	V	1.0	19.36
52.734375	23.29	40.00	16.71	100.0	V	295.0	20.94
101.840625	18.48	40.00	21.52	200.0	V	194.0	19.31
178.652500	20.32	40.00	19.68	100.0	V	120.0	17.01
948.650625	35.62	47.00	11.38	100.0	V	0.0	32.68



China

M/N: AOK-60WiPS-NVS-L3-00-6580-T4-A
Op Cond: ON
Comment: AC 230V/50Hz
Test Spec: Horizontal
Remark: SS-60VA-L50B



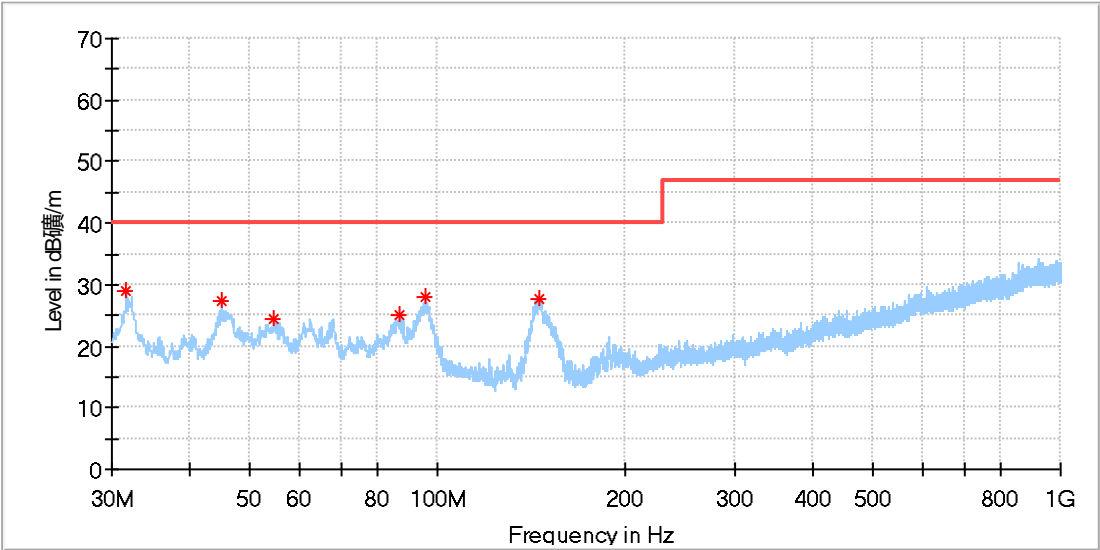
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
50.188125	19.54	40.00	20.46	200.0	H	88.0	21.01
97.233125	19.44	40.00	20.56	200.0	H	305.0	18.69
144.096250	18.82	40.00	21.18	200.0	H	313.0	15.47
268.013750	23.10	47.00	23.91	100.0	H	70.0	20.84
429.640000	26.75	47.00	20.25	100.0	H	5.0	24.89
933.979375	34.29	47.00	12.71	100.0	H	0.0	32.68



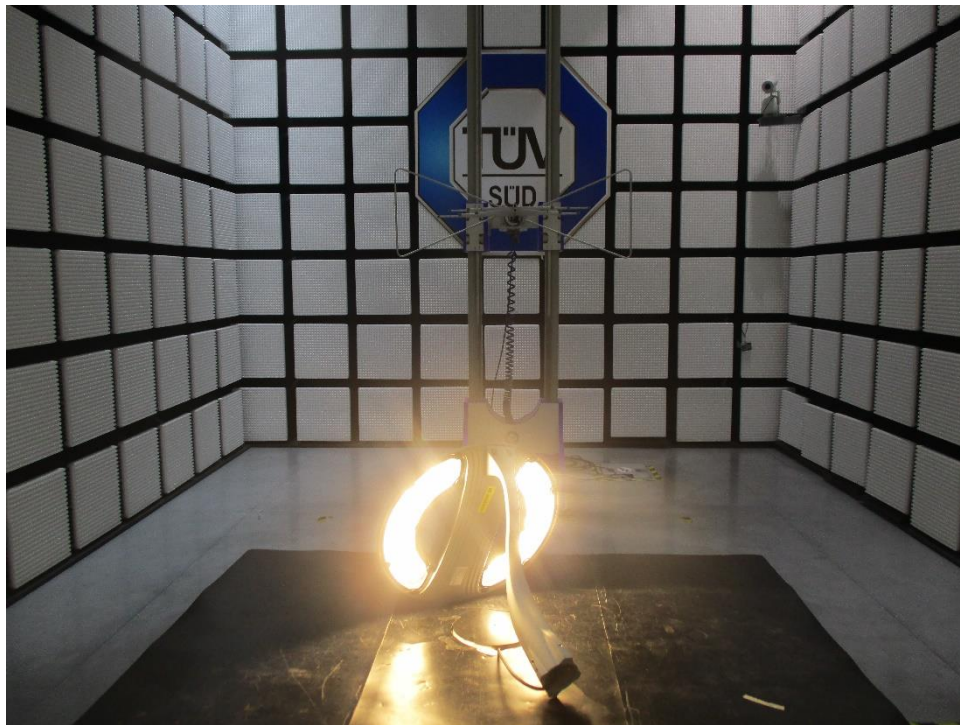
China

M/N: AOK-60WiPS-NVS-L3-00-6580-T4-A
Op Cond: ON
Comment: AC 230V/50Hz
Test Spec: Vertical
Remark: SS-60VA-L50B



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
31.697500	28.87	40.00	11.13	100.0	V	0.0	17.17
45.095625	27.33	40.00	12.67	100.0	V	140.0	20.73
54.735000	24.30	40.00	15.70	100.0	V	0.0	20.82
87.108750	24.93	40.00	15.07	100.0	V	314.0	15.87
95.535625	28.15	40.00	11.85	100.0	V	0.0	18.35
146.096875	27.74	40.00	12.26	100.0	V	358.0	15.48



Test Setup

2.3.8 Test Location

This test was carried out in 3m anechoic chamber.

2.4 Harmonic Current Emissions

2.4.1 Specification Reference

EN IEC 61000-3-2:2019/A1:2021, Clause 7

2.4.2 Equipment Under Test

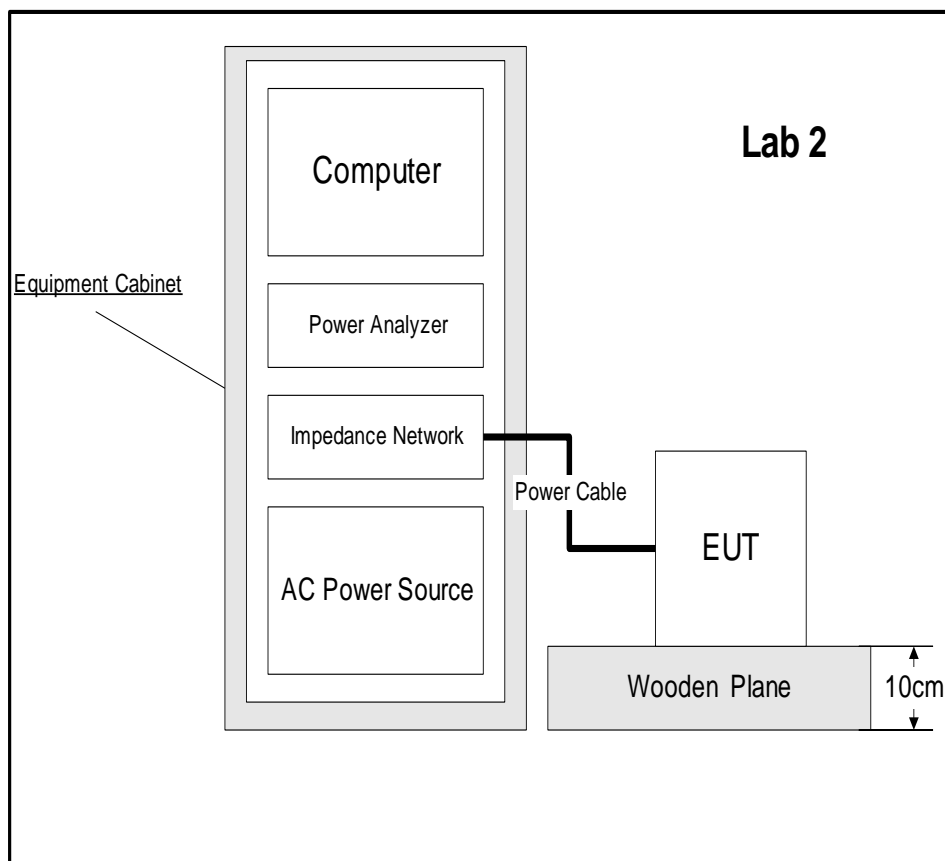
AOK-50WiP-NV-L3-00-6570-T5-P-I, AOK-75WiP-NV-L3-00-6570-T5-P-I,
AOK-120WiP-NV-L3-00-6570-T5-P-I, AOK-50WiPS-NVS-L3-00-6580-T4-A,
AOK-60WiPS-NVS-L3-00-6580-T4-A

2.4.3 Date of Test

2019-01-04; 2020-01-17; 2020-04-09, 2022-05-25

2.4.4 Test Method

The EUT was placed on a non-conductive table 0.8 m above a reference ground plane. All power was connected to the EUT through a software controller AC power amplifier. The amplitude of the AC mains harmonic components was then measured.





China

2.4.5 Environmental Conditions

Ambient Temperature 23.0 °C
 Relative Humidity 51.2 %
 Atmospheric Pressure 1020.0 mbar

2.4.6 Specification Limits

Limits for class C Equipment active input power > 25W	
Harmonic order	Maximum permissible harmonic current expressed as a percentage of the input current at the fundamental frequency
n	%
2	2
3	27 ^b
5	10
7	7
9	5
11 ≤ h ≤ 39	3
(odd harmonics only)	
b The limit is determined based on the assumption of modern lighting technologies having power factors of 0,90 or higher.	

2.4.7 Test Results

Results for Configuration and Mode: AC Powered/ON.

Performance assessment of the EUT made during this test: *Pass*.

Detailed results are shown below.

Line Under Test: power line



China

EUT: AOK-50WiP-NV-L3-00-6570-T5-P-I

Tested by: Leo

Test category: Class-C per Ed. 4.0 (2014) (European limits) Test Margin: 100

Test date: 2019/1/4

Start time: 13:40:06

End time: 13:42:59

Test duration (min): 2.5

Data file name: CTSMXL_H-000685.cts_data

Comment: ON

Remark: XLG-50-AB

Test Result: Pass

Source qualification: Normal

THC(A): 0.008

I-THD(%): 3.6

POHC(A): 0.000

POHC Limit(A): 0.021

Highest parameter values during test:

V_RMS (Volts): 229.889

Frequency(Hz): 50.00

I_Peak (Amps): 0.344

I_RMS (Amps): 0.223

I_Fund (Amps): 0.223

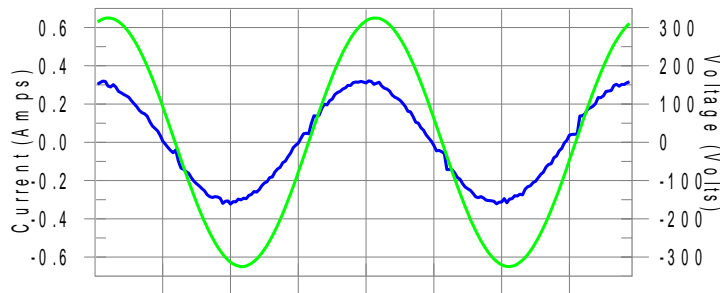
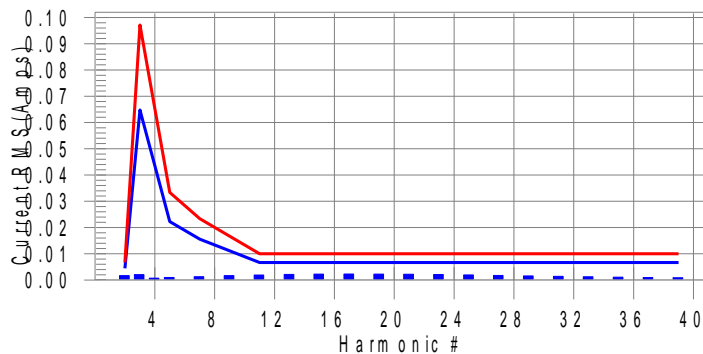
Crest Factor: 1.552

Power (Watts): 49.7

Power Factor: 0.970

Test Result: Pass

Source qualification: Normal

Current & voltage waveforms**Harmonics and Class C limit line****European Limits****Test result: Pass Worst harmonics H0-0.0% of 150% limit, H0-0% of 100% limit.**

Current Test Result Summary (Run time)

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.002	0.004	N/A	0.002	0.007	N/A	Pass
3	0.002	0.065	N/A	0.003	0.097	N/A	Pass
4	0.001	0.000	N/A	0.001	0.000	N/A	Pass
5	0.001	0.022	N/A	0.001	0.033	N/A	Pass
6	0.000	0.000	N/A	0.000	0.000	N/A	Pass
7	0.001	0.016	N/A	0.001	0.023	N/A	Pass
8	0.000	0.000	N/A	0.000	0.000	N/A	Pass
9	0.002	0.011	N/A	0.002	0.017	N/A	Pass
10	0.000	0.000	N/A	0.000	0.000	N/A	Pass
11	0.002	0.007	N/A	0.002	0.010	N/A	Pass
12	0.000	0.000	N/A	0.000	0.000	N/A	Pass
13	0.002	0.007	N/A	0.002	0.010	N/A	Pass
14	0.000	0.000	N/A	0.000	0.000	N/A	Pass
15	0.002	0.007	N/A	0.002	0.010	N/A	Pass
16	0.000	0.000	N/A	0.000	0.000	N/A	Pass
17	0.002	0.007	N/A	0.002	0.010	N/A	Pass
18	0.000	0.000	N/A	0.001	0.000	N/A	Pass
19	0.002	0.007	N/A	0.002	0.010	N/A	Pass
20	0.000	0.000	N/A	0.002	0.000	N/A	Pass
21	0.002	0.007	N/A	0.002	0.010	N/A	Pass
22	0.000	0.000	N/A	0.001	0.000	N/A	Pass
23	0.002	0.007	N/A	0.002	0.010	N/A	Pass
24	0.000	0.000	N/A	0.001	0.000	N/A	Pass
25	0.002	0.007	N/A	0.002	0.010	N/A	Pass
26	0.000	0.000	N/A	0.002	0.000	N/A	Pass
27	0.002	0.007	N/A	0.002	0.010	N/A	Pass
28	0.000	0.000	N/A	0.001	0.000	N/A	Pass
29	0.002	0.007	N/A	0.002	0.010	N/A	Pass
30	0.000	0.000	N/A	0.000	0.000	N/A	Pass
31	0.001	0.007	N/A	0.002	0.010	N/A	Pass
32	0.000	0.000	N/A	0.000	0.000	N/A	Pass
33	0.001	0.007	N/A	0.001	0.010	N/A	Pass
34	0.000	0.000	N/A	0.000	0.000	N/A	Pass
35	0.001	0.007	N/A	0.001	0.010	N/A	Pass
36	0.000	0.000	N/A	0.000	0.000	N/A	Pass
37	0.001	0.007	N/A	0.001	0.010	N/A	Pass
38	0.000	0.000	N/A	0.000	0.000	N/A	Pass
39	0.001	0.007	N/A	0.001	0.010	N/A	Pass
40	0.000	0.000	N/A	0.000	0.000	N/A	Pass

Note: Dynamic limits were applied for this test. The highest harmonics values in the above table may not occur at the same window as the maximum harmonics/limit ratio.

Harmonics – Class-C per Ed. 4.0 (2014)(Run time)

EUT: AOK-50WiP-NV-L3-00-6570-T5-P-I

Tested by: Jacob

Test category: Class-C per Ed. 4.0 (2014) (European limits)

Test Margin: 100

Test date: 09/04/2020

Start time: 10:40:09

End time: 10:43:02

Test duration (min): 2.5

Data file name: CTSMXL_H-001270.cts_data

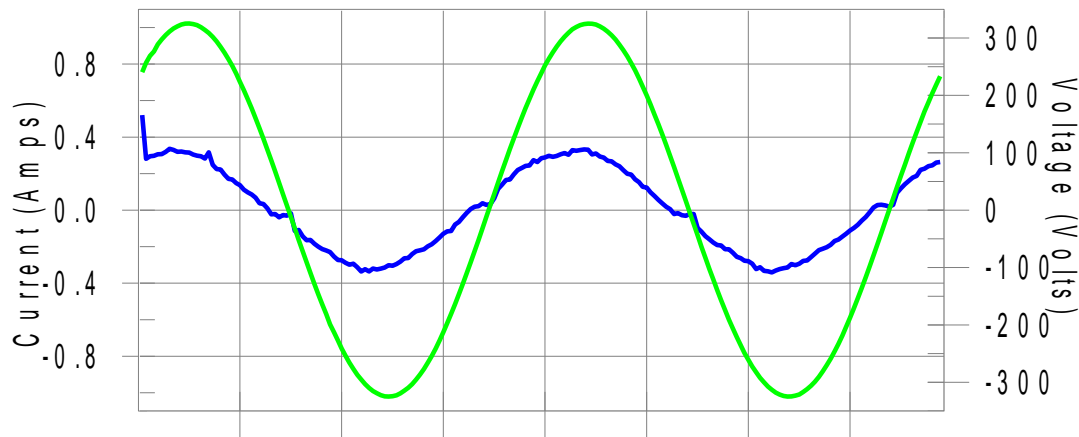
Comment: ON

Remark: SS-50VP-56DH

Test Result: Pass

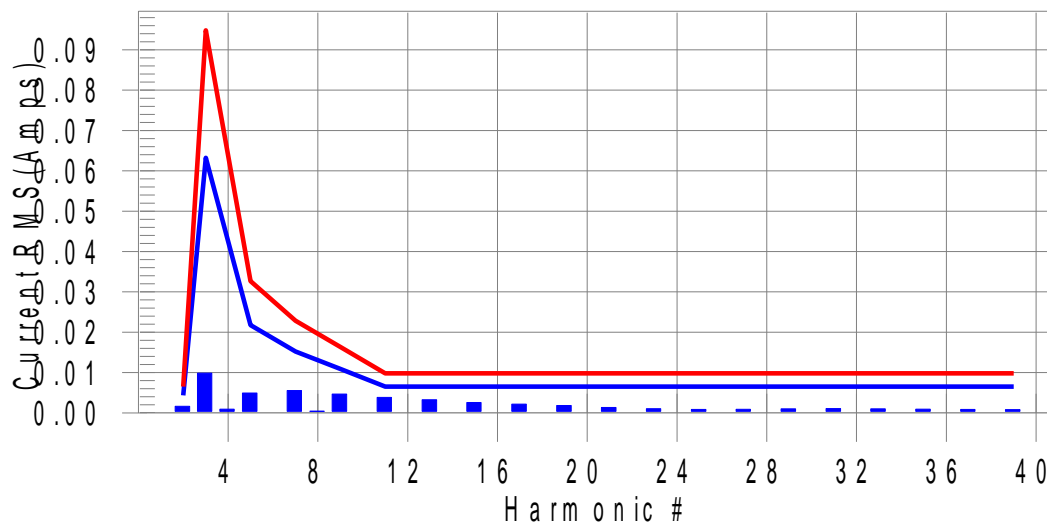
Source qualification: Normal

Current & voltage waveforms



Harmonics and Class C limit line

European Limits



Test result: Pass Worst harmonics H7-26.1% of 150% limit, H7-36.3% of 100% limit.

Current Test Result Summary (Run time)

Test Result: Pass Source qualification: Normal
 THC(A): 0.015 I-THD(%): 7.0 POHC(A): 0.000 POHC Limit(A): 0.021

Highest parameter values during test:

V_RMS (Volts):	229.987	Frequency(Hz):	50.00
I_Peak (Amps):	0.659	I_RMS (Amps):	0.219
I_Fund (Amps):	0.218	Crest Factor:	3.021
Power (Watts):	48.6	Power Factor:	0.968

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.002	0.004	N/A	0.002	0.007	N/A	Pass
3	0.010	0.063	15.6	0.012	0.095	12.2	Pass
4	0.001	0.000	N/A	0.001	0.000	N/A	Pass
5	0.005	0.022	N/A	0.005	0.033	N/A	Pass
6	0.000	0.000	N/A	0.001	0.000	N/A	Pass
7	0.006	0.015	36.3	0.006	0.023	26.1	Pass
8	0.000	0.000	N/A	0.001	0.000	N/A	Pass
9	0.005	0.011	N/A	0.005	0.016	N/A	Pass
10	0.000	0.000	N/A	0.001	0.000	N/A	Pass
11	0.004	0.007	N/A	0.004	0.010	N/A	Pass
12	0.000	0.000	N/A	0.001	0.000	N/A	Pass
13	0.003	0.007	N/A	0.003	0.010	N/A	Pass
14	0.000	0.000	N/A	0.001	0.000	N/A	Pass
15	0.003	0.007	N/A	0.003	0.010	N/A	Pass
16	0.000	0.000	N/A	0.001	0.000	N/A	Pass
17	0.002	0.007	N/A	0.002	0.010	N/A	Pass
18	0.000	0.000	N/A	0.000	0.000	N/A	Pass
19	0.002	0.007	N/A	0.002	0.010	N/A	Pass
20	0.000	0.000	N/A	0.000	0.000	N/A	Pass
21	0.001	0.007	N/A	0.001	0.010	N/A	Pass
22	0.000	0.000	N/A	0.000	0.000	N/A	Pass
23	0.001	0.007	N/A	0.001	0.010	N/A	Pass
24	0.000	0.000	N/A	0.000	0.000	N/A	Pass
25	0.001	0.007	N/A	0.001	0.010	N/A	Pass
26	0.000	0.000	N/A	0.000	0.000	N/A	Pass
27	0.001	0.007	N/A	0.001	0.010	N/A	Pass
28	0.000	0.000	N/A	0.000	0.000	N/A	Pass
29	0.001	0.007	N/A	0.001	0.010	N/A	Pass
30	0.000	0.000	N/A	0.000	0.000	N/A	Pass
31	0.001	0.007	N/A	0.001	0.010	N/A	Pass
32	0.000	0.000	N/A	0.000	0.000	N/A	Pass
33	0.001	0.007	N/A	0.001	0.010	N/A	Pass
34	0.000	0.000	N/A	0.000	0.000	N/A	Pass
35	0.001	0.007	N/A	0.001	0.010	N/A	Pass
36	0.000	0.000	N/A	0.000	0.000	N/A	Pass
37	0.001	0.007	N/A	0.001	0.010	N/A	Pass
38	0.000	0.000	N/A	0.000	0.000	N/A	Pass
39	0.001	0.007	N/A	0.001	0.010	N/A	Pass
40	0.000	0.000	N/A	0.000	0.000	N/A	Pass

Note: Dynamic limits were applied for this test. The highest harmonics values in the above table may not occur at the same window as the maximum harmonics/limit ratio.



China

Voltage Source Verification Data (Run time)

Harm#	Harmonics V-rms	Limit V-rms	% of Limit	Status
2	0.163	0.460	35.52	OK
3	0.187	2.070	9.05	OK
4	0.063	0.460	13.71	OK
5	0.060	0.920	6.53	OK
6	0.028	0.460	6.18	OK
7	0.051	0.690	7.45	OK
8	0.028	0.460	5.99	OK
9	0.032	0.460	6.90	OK
10	0.029	0.460	6.41	OK
11	0.032	0.230	13.90	OK
12	0.022	0.230	9.78	OK
13	0.038	0.230	16.62	OK
14	0.026	0.230	11.31	OK
15	0.024	0.230	10.33	OK
16	0.026	0.230	11.33	OK
17	0.030	0.230	13.00	OK
18	0.019	0.230	8.44	OK
19	0.026	0.230	11.45	OK
20	0.027	0.230	11.65	OK
21	0.024	0.230	10.50	OK
22	0.021	0.230	9.17	OK
23	0.024	0.230	10.53	OK
24	0.019	0.230	8.06	OK
25	0.023	0.230	10.01	OK
26	0.020	0.230	8.62	OK
27	0.023	0.230	9.94	OK
28	0.023	0.230	9.85	OK
29	0.023	0.230	9.98	OK
30	0.020	0.230	8.54	OK
31	0.020	0.230	8.76	OK
32	0.022	0.230	9.44	OK
33	0.024	0.230	10.23	OK
34	0.018	0.230	7.90	OK
35	0.020	0.230	8.63	OK
36	0.020	0.230	8.72	OK
37	0.025	0.230	10.84	OK
38	0.026	0.230	11.50	OK
39	0.022	0.230	9.72	OK
40	0.030	0.230	12.93	OK



China

EUT: AOK-75WiP-NV-L3-00-6570-T5-P-I

Tested by: Leo

Test category: Class-C per Ed. 4.0 (2014) (European limits) Test Margin: 100

Test date: 2019/1/4

Start time: 12:11:18

End time: 12:14:11

Test duration (min): 2.5

Data file name: CTSMXL_H-000684.cts_data

Comment: ON

Remark: Xi LP 100W 0.3-1.05A S1 230V 1175

Test Result: Pass

Source qualification: Normal

THC(A): 0.026

I-THD(%): 5.3

POHC(A): 0.000

POHC Limit(A): 0.046

Highest parameter values during test:

V_RMS (Volts): 229.791

Frequency(Hz): 50.00

I_Peak (Amps): 0.891

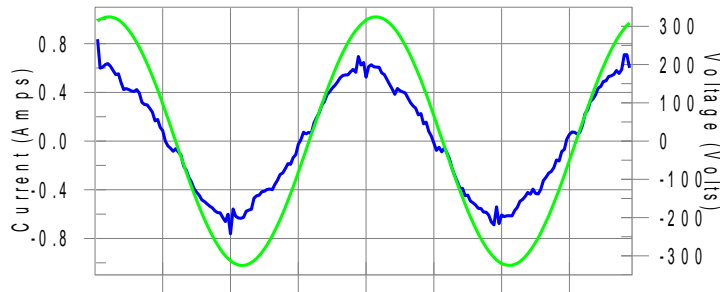
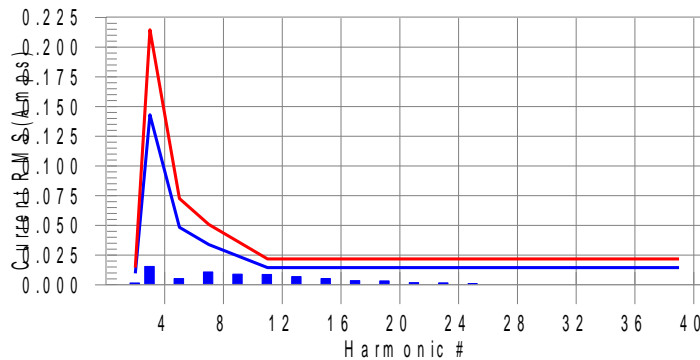
I_RMS (Amps): 0.486

I_Fund (Amps): 0.484

Crest Factor: 2.047

Power (Watts): 110.1

Power Factor: 0.985

Current & voltage waveforms**Harmonics and Class C limit line****European Limits****Test result: Pass Worst harmonics H13-60.4% of 150% limit, H11-60.3% of 100% limit.**

Current Test Result Summary (Run time)

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.002	0.010	N/A	0.002	0.015	N/A	Pass
3	0.015	0.143	10.8	0.020	0.215	9.5	Pass
4	0.001	0.000	N/A	0.001	0.000	N/A	Pass
5	0.005	0.048	10.9	0.006	0.073	7.6	Pass
6	0.000	0.000	N/A	0.001	0.000	N/A	Pass
7	0.011	0.034	31.9	0.016	0.051	31.7	Pass
8	0.000	0.000	N/A	0.001	0.000	N/A	Pass
9	0.009	0.024	37.3	0.010	0.036	26.6	Pass
10	0.000	0.000	N/A	0.001	0.000	N/A	Pass
11	0.009	0.015	60.3	0.012	0.022	54.4	Pass
12	0.000	0.000	N/A	0.001	0.000	N/A	Pass
13	0.007	0.015	48.0	0.013	0.022	60.4	Pass
14	0.000	0.000	N/A	0.001	0.000	N/A	Pass
15	0.005	0.015	36.6	0.006	0.022	29.0	Pass
16	0.000	0.000	N/A	0.001	0.000	N/A	Pass
17	0.004	0.015	N/A	0.004	0.022	N/A	Pass
18	0.000	0.000	N/A	0.001	0.000	N/A	Pass
19	0.003	0.015	N/A	0.007	0.022	N/A	Pass
20	0.000	0.000	N/A	0.001	0.000	N/A	Pass
21	0.002	0.015	N/A	0.003	0.022	N/A	Pass
22	0.000	0.000	N/A	0.001	0.000	N/A	Pass
23	0.002	0.015	N/A	0.004	0.022	N/A	Pass
24	0.000	0.000	N/A	0.001	0.000	N/A	Pass
25	0.001	0.015	N/A	0.003	0.022	N/A	Pass
26	0.000	0.000	N/A	0.001	0.000	N/A	Pass
27	0.001	0.015	N/A	0.002	0.022	N/A	Pass
28	0.000	0.000	N/A	0.001	0.000	N/A	Pass
29	0.001	0.015	N/A	0.002	0.022	N/A	Pass
30	0.000	0.000	N/A	0.001	0.000	N/A	Pass
31	0.000	0.015	N/A	0.002	0.022	N/A	Pass
32	0.000	0.000	N/A	0.001	0.000	N/A	Pass
33	0.000	0.015	N/A	0.002	0.022	N/A	Pass
34	0.000	0.000	N/A	0.001	0.000	N/A	Pass
35	0.000	0.015	N/A	0.003	0.022	N/A	Pass
36	0.000	0.000	N/A	0.001	0.000	N/A	Pass
37	0.000	0.015	N/A	0.001	0.022	N/A	Pass
38	0.000	0.000	N/A	0.001	0.000	N/A	Pass
39	0.001	0.015	N/A	0.002	0.022	N/A	Pass
40	0.000	0.000	N/A	0.001	0.000	N/A	Pass

Note: Dynamic limits were applied for this test. The highest harmonics values in the above table may not occur at the same window as the maximum harmonics/limit ratio.

Harmonics – Class-C per Ed. 4.0 (2014)(Run time)

EUT: AOK-75WiP-NV-L3-00-6570-T5-P-I

Tested by: Leo

Test category: Class-C per Ed. 4.0 (2014) (European limits) Test Margin: 100

Test date: 17/01/2020

Start time: 11:06:01

End time: 11:08:53

Test duration (min): 2.5

Data file name: CTSMXL_H-000451.cts_data

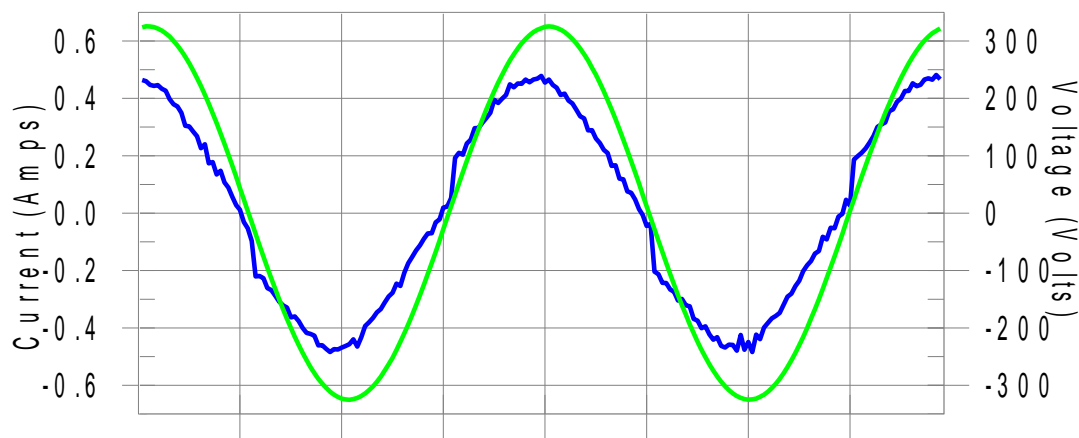
Comment: ON

Remark: SS-75VP-56DH

Test Result: Pass

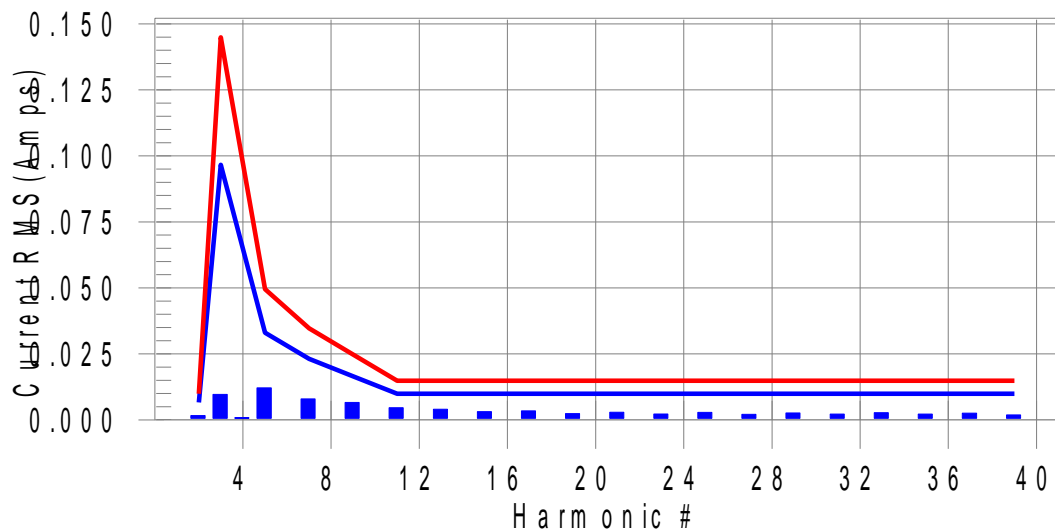
Source qualification: Normal

Current & voltage waveforms



Harmonics and Class C limit line

European Limits



Test result: Pass Worst harmonics H9-27.7% of 150% limit, H9-40% of 100% limit.

Current Test Result Summary (Run time)

Test Result: Pass Source qualification: Normal
 THC(A): 0.022 I-THD(%): 6.6 POHC(A): 0.000 POHC Limit(A): 0.031

Highest parameter values during test:

V_RMS (Volts):	229.982	Frequency(Hz):	50.00
I_Peak (Amps):	0.540	I_RMS (Amps):	0.331
I_Fund (Amps):	0.330	Crest Factor:	1.632
Power (Watts):	74.2	Power Factor:	0.975

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.002	0.007	N/A	0.002	0.010	N/A	Pass
3	0.010	0.097	10.0	0.011	0.145	7.7	Pass
4	0.001	0.000	N/A	0.001	0.000	N/A	Pass
5	0.012	0.033	36.8	0.012	0.050	25.0	Pass
6	0.000	0.000	N/A	0.001	0.000	N/A	Pass
7	0.008	0.023	34.3	0.008	0.035	23.8	Pass
8	0.001	0.000	N/A	0.002	0.000	N/A	Pass
9	0.007	0.017	40.0	0.007	0.025	27.7	Pass
10	0.000	0.000	N/A	0.001	0.000	N/A	Pass
11	0.005	0.010	N/A	0.005	0.015	N/A	Pass
12	0.000	0.000	N/A	0.001	0.000	N/A	Pass
13	0.004	0.010	N/A	0.004	0.015	N/A	Pass
14	0.001	0.000	N/A	0.001	0.000	N/A	Pass
15	0.003	0.010	N/A	0.003	0.015	N/A	Pass
16	0.000	0.000	N/A	0.001	0.000	N/A	Pass
17	0.003	0.010	N/A	0.004	0.015	N/A	Pass
18	0.000	0.000	N/A	0.000	0.000	N/A	Pass
19	0.002	0.010	N/A	0.003	0.015	N/A	Pass
20	0.000	0.000	N/A	0.000	0.000	N/A	Pass
21	0.003	0.010	N/A	0.003	0.015	N/A	Pass
22	0.000	0.000	N/A	0.000	0.000	N/A	Pass
23	0.002	0.010	N/A	0.002	0.015	N/A	Pass
24	0.000	0.000	N/A	0.000	0.000	N/A	Pass
25	0.003	0.010	N/A	0.003	0.015	N/A	Pass
26	0.000	0.000	N/A	0.001	0.000	N/A	Pass
27	0.002	0.010	N/A	0.002	0.015	N/A	Pass
28	0.000	0.000	N/A	0.001	0.000	N/A	Pass
29	0.003	0.010	N/A	0.003	0.015	N/A	Pass
30	0.000	0.000	N/A	0.000	0.000	N/A	Pass
31	0.002	0.010	N/A	0.002	0.015	N/A	Pass
32	0.000	0.000	N/A	0.000	0.000	N/A	Pass
33	0.003	0.010	N/A	0.003	0.015	N/A	Pass
34	0.000	0.000	N/A	0.000	0.000	N/A	Pass
35	0.002	0.010	N/A	0.002	0.015	N/A	Pass
36	0.000	0.000	N/A	0.000	0.000	N/A	Pass
37	0.003	0.010	N/A	0.003	0.015	N/A	Pass
38	0.000	0.000	N/A	0.000	0.000	N/A	Pass
39	0.002	0.010	N/A	0.002	0.015	N/A	Pass
40	0.000	0.000	N/A	0.000	0.000	N/A	Pass

Note: Dynamic limits were applied for this test. The highest harmonics values in the above table may not occur at the same window as the maximum harmonics/limit ratio.



China

Voltage Source Verification Data (Run time)

Harm#	Harmonics V-rms	Limit V-rms	% of Limit	Status
2	0.154	0.460	33.49	OK
3	0.192	2.069	9.25	OK
4	0.054	0.460	11.70	OK
5	0.069	0.920	7.55	OK
6	0.025	0.460	5.39	OK
7	0.059	0.690	8.51	OK
8	0.029	0.460	6.31	OK
9	0.042	0.460	9.05	OK
10	0.023	0.460	4.91	OK
11	0.027	0.230	11.56	OK
12	0.017	0.230	7.42	OK
13	0.023	0.230	10.12	OK
14	0.023	0.230	9.91	OK
15	0.027	0.230	11.53	OK
16	0.022	0.230	9.63	OK
17	0.033	0.230	14.25	OK
18	0.018	0.230	7.87	OK
19	0.028	0.230	12.28	OK
20	0.027	0.230	11.80	OK
21	0.025	0.230	10.78	OK
22	0.018	0.230	7.96	OK
23	0.029	0.230	12.80	OK
24	0.019	0.230	8.11	OK
25	0.028	0.230	12.21	OK
26	0.019	0.230	8.26	OK
27	0.022	0.230	9.52	OK
28	0.021	0.230	9.31	OK
29	0.022	0.230	9.58	OK
30	0.018	0.230	7.91	OK
31	0.023	0.230	10.13	OK
32	0.020	0.230	8.50	OK
33	0.023	0.230	9.79	OK
34	0.019	0.230	8.35	OK
35	0.031	0.230	13.38	OK
36	0.018	0.230	7.82	OK
37	0.024	0.230	10.34	OK
38	0.018	0.230	7.98	OK
39	0.024	0.230	10.56	OK
40	0.024	0.230	10.53	OK

Harmonics – Class-C per Ed. 5.0 (2018)(Run time)

EUT: AOK-75WiP-NV-L3-00-6570-T5-P-I

Tested by: Molly

Test category: Class-C per Ed. 5.0 (2018) (European limits)

Test Margin: 100

Test date: 25/05/2022

Start time: 11:34:32

End time: 11:37:14

Test duration (min): 2.5

Data file name: CTSMXL_H-000460.cts_data

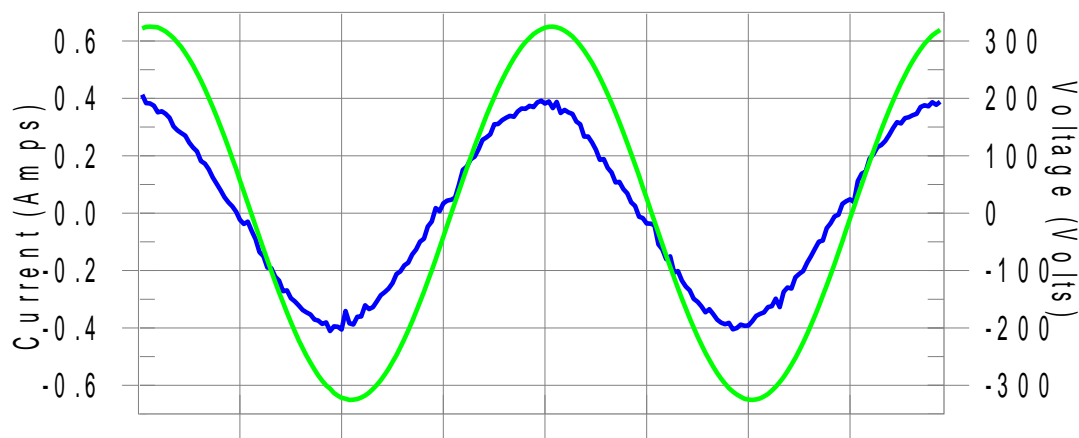
Comment: ON

Remark: XLG-75-H-AB

Test Result: Pass

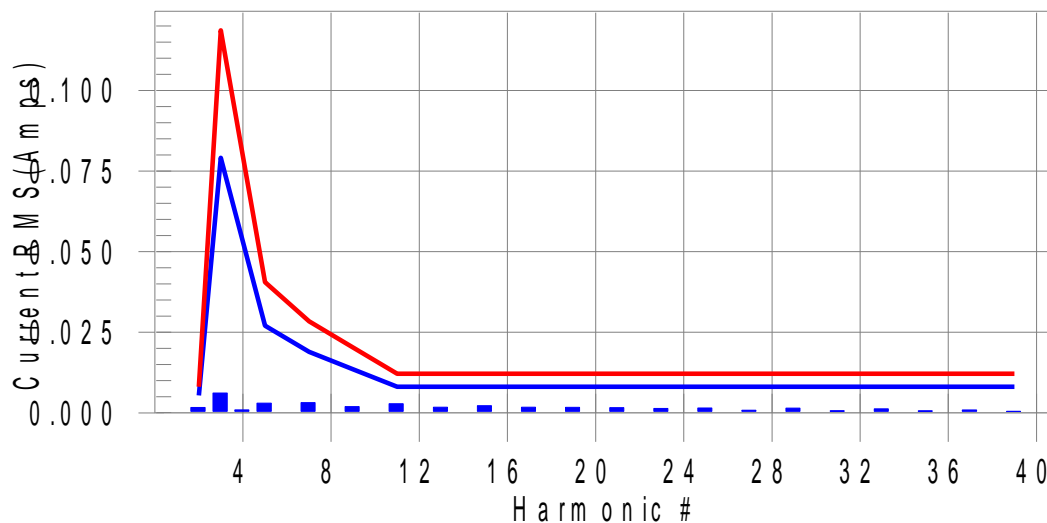
Source qualification: Normal

Current & voltage waveforms



Harmonics and Class C limit line

European Limits



Test result: Pass Worst harmonics H3-6.3% of 150% limit, H3-7.8% of 100% limit.

Current Test Result Summary (Run time)

EUT: AOK-75WiP-NV-L3-00-6570-T5-P-I Tested by: Molly
 Test category: Class-C per Ed. 5.0 (2018) (European limits) Test Margin: 100
 Test date: 25/05/2022 Start time: 11:34:32 End time: 11:37:14
 Test duration (min): 2.5 Data file name: CTSMXL_H-000460.cts_data
 Comment: ON
 Remark: XLG-75-H-AB

Test Result: Pass Source qualification: Normal
 THC(A): 0.010 I-THD(%): 3.7 POHC(A): 0.004 POHC Limit(A): 0.026

Highest parameter values during test:

V _{RMS} (Volts):	230.047	Frequency(Hz):	50.00
I _{Peak} (Amps):	0.514	I _{RMS} (Amps):	0.271
I _{Fund} (Amps):	0.270	Crest Factor:	1.900
Power (Watts):	60.7	Power Factor:	0.975

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.002	0.005	N/A	0.002	0.008	N/A	Pass
3	0.006	0.079	7.8	0.007	0.119	6.3	Pass
4	0.001	0.000	N/A	0.001	0.000	N/A	Pass
5	0.003	0.027	N/A	0.003	0.041	N/A	Pass
6	0.000	0.000	N/A	0.000	0.000	N/A	Pass
7	0.003	0.019	N/A	0.004	0.028	N/A	Pass
8	0.000	0.000	N/A	0.000	0.000	N/A	Pass
9	0.002	0.014	N/A	0.002	0.020	N/A	Pass
10	0.000	0.000	N/A	0.000	0.000	N/A	Pass
11	0.003	0.008	N/A	0.003	0.012	N/A	Pass
12	0.000	0.000	N/A	0.000	0.000	N/A	Pass
13	0.002	0.008	N/A	0.002	0.012	N/A	Pass
14	0.000	0.000	N/A	0.000	0.000	N/A	Pass
15	0.002	0.008	N/A	0.002	0.012	N/A	Pass
16	0.000	0.000	N/A	0.000	0.000	N/A	Pass
17	0.002	0.008	N/A	0.002	0.012	N/A	Pass
18	0.000	0.000	N/A	0.000	0.000	N/A	Pass
19	0.002	0.008	N/A	0.002	0.012	N/A	Pass
20	0.000	0.000	N/A	0.000	0.000	N/A	Pass
21	0.002	0.008	N/A	0.002	0.012	N/A	Pass
22	0.000	0.000	N/A	0.000	0.000	N/A	Pass
23	0.001	0.008	N/A	0.002	0.012	N/A	Pass
24	0.000	0.000	N/A	0.000	0.000	N/A	Pass
25	0.002	0.008	N/A	0.002	0.012	N/A	Pass
26	0.000	0.000	N/A	0.000	0.000	N/A	Pass
27	0.001	0.008	N/A	0.001	0.012	N/A	Pass
28	0.000	0.000	N/A	0.000	0.000	N/A	Pass
29	0.001	0.008	N/A	0.002	0.012	N/A	Pass
30	0.000	0.000	N/A	0.000	0.000	N/A	Pass
31	0.001	0.008	N/A	0.001	0.012	N/A	Pass
32	0.000	0.000	N/A	0.000	0.000	N/A	Pass
33	0.001	0.008	N/A	0.002	0.012	N/A	Pass
34	0.000	0.000	N/A	0.001	0.000	N/A	Pass
35	0.001	0.008	N/A	0.001	0.012	N/A	Pass
36	0.000	0.000	N/A	0.001	0.000	N/A	Pass
37	0.001	0.008	N/A	0.001	0.012	N/A	Pass
38	0.000	0.000	N/A	0.000	0.000	N/A	Pass
39	0.000	0.008	N/A	0.001	0.012	N/A	Pass
40	0.000	0.000	N/A	0.001	0.000	N/A	Pass

Note: Dynamic limits were applied for this test. The highest harmonics values in the above table may not occur at the same window as the maximum harmonics/limit ratio.



China

Voltage Source Verification Data (Run time)

EUT: AOK-75WiP-NV-L3-00-6570-T5-P-I Tested by: Molly
 Test category: Class-C per Ed. 5.0 (2018) (European limits) Test Margin: 100
 Test date: 25/05/2022 Start time: 11:34:32 End time: 11:37:14
 Test duration (min): 2.5 Data file name: CTSMXL_H-000460.cts_data
 Comment: ON
 Remark: XLG-75-H-AB

Test Result: Pass Source qualification: Normal
 Measured source distortion is within the requirements of the standards
 Measurements are compliant with IEC/EN61000-3-2 Ed. 5 & IEC/EN61000-4-7 Ed. 2.1

Highest parameter values during test:

Voltage (Vrms):	230.047	Frequency(Hz):	50.00
I_Peak (Amps):	0.514	I_RMS (Amps):	0.271
I_Fund (Amps):	0.270	Crest Factor:	1.900
Power (Watts):	60.7	Power Factor:	0.975

Harm#	Harmonics V-rms	Limit V-rms	% of Limit	Status
2	0.153	0.460	33.32	OK
3	0.188	2.070	9.06	OK
4	0.055	0.460	12.05	OK
5	0.068	0.920	7.41	OK
6	0.025	0.460	5.36	OK
7	0.059	0.690	8.53	OK
8	0.024	0.460	5.28	OK
9	0.028	0.460	6.09	OK
10	0.024	0.460	5.13	OK
11	0.031	0.230	13.50	OK
12	0.018	0.230	7.63	OK
13	0.026	0.230	11.28	OK
14	0.017	0.230	7.60	OK
15	0.023	0.230	9.90	OK
16	0.017	0.230	7.18	OK
17	0.020	0.230	8.87	OK
18	0.013	0.230	5.84	OK
19	0.024	0.230	10.48	OK
20	0.026	0.230	11.47	OK
21	0.020	0.230	8.74	OK
22	0.016	0.230	7.11	OK
23	0.025	0.230	10.96	OK
24	0.015	0.230	6.55	OK
25	0.022	0.230	9.65	OK
26	0.015	0.230	6.64	OK
27	0.024	0.230	10.41	OK
28	0.016	0.230	7.00	OK
29	0.020	0.230	8.49	OK
30	0.016	0.230	6.91	OK
31	0.020	0.230	8.71	OK
32	0.019	0.230	8.39	OK
33	0.020	0.230	8.77	OK
34	0.018	0.230	7.74	OK
35	0.027	0.230	11.92	OK
36	0.015	0.230	6.55	OK
37	0.019	0.230	8.22	OK
38	0.018	0.230	7.74	OK
39	0.021	0.230	9.31	OK
40	0.023	0.230	9.90	OK



China

EUT: AOK-120WiP-NV-L3-00-6570-T5-P-I

Tested by: Leo

Test category: Class-C per Ed. 4.0 (2014) (European limits) Test Margin: 100

Test date: 2019/1/4

Start time: 14:03:36

End time: 14:06:29

Test duration (min): 2.5

Data file name: CTSMXL_H-000686.cts_data

Comment: ON

Remark: Xi LP 150W 0.3-1.05A S1 230V 1175

Test Result: Pass

Source qualification: Normal

THC(A): 0.028

I-THD(%): 5.2

POHC(A): 0.000

POHC Limit(A): 0.051

Highest parameter values during test:

V_RMS (Volts): 229.780

Frequency(Hz): 50.00

I_Peak (Amps): 0.852

I_RMS (Amps): 0.535

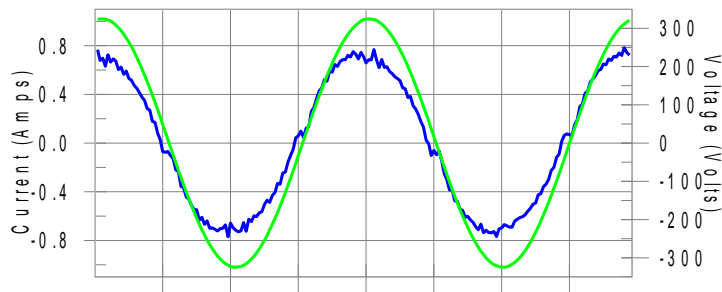
I_Fund (Amps): 0.533

Crest Factor: 1.600

Power (Watts): 121.3

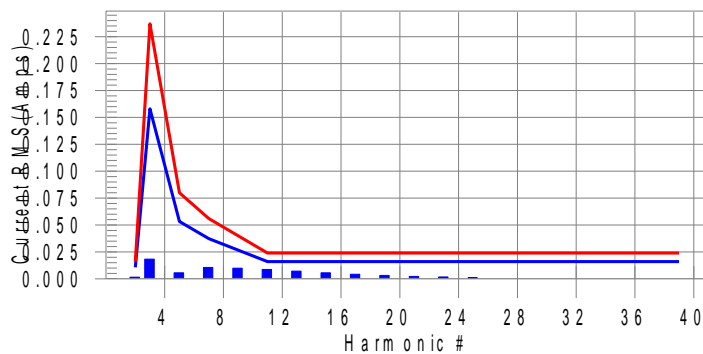
Power Factor: 0.987

Current & voltage waveforms



Harmonics and Class C limit line

European Limits

**Test result: Pass Worst harmonics H11-37.4% of 150% limit, H11-54.4% of 100% limit.**

Current Test Result Summary (Run time)

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.002	0.011	N/A	0.002	0.016	N/A	Pass
3	0.018	0.158	11.6	0.020	0.237	8.5	Pass
4	0.001	0.000	N/A	0.001	0.000	N/A	Pass
5	0.006	0.053	10.5	0.006	0.080	7.3	Pass
6	0.000	0.000	N/A	0.001	0.000	N/A	Pass
7	0.011	0.037	28.3	0.011	0.056	19.4	Pass
8	0.000	0.000	N/A	0.001	0.000	N/A	Pass
9	0.010	0.027	37.2	0.010	0.040	25.7	Pass
10	0.000	0.000	N/A	0.000	0.000	N/A	Pass
11	0.009	0.016	54.4	0.009	0.024	37.4	Pass
12	0.000	0.000	N/A	0.001	0.000	N/A	Pass
13	0.007	0.016	44.6	0.007	0.024	30.6	Pass
14	0.000	0.000	N/A	0.001	0.000	N/A	Pass
15	0.006	0.016	34.9	0.006	0.024	24.7	Pass
16	0.000	0.000	N/A	0.001	0.000	N/A	Pass
17	0.004	0.016	N/A	0.005	0.024	N/A	Pass
18	0.000	0.000	N/A	0.001	0.000	N/A	Pass
19	0.003	0.016	N/A	0.004	0.024	N/A	Pass
20	0.000	0.000	N/A	0.001	0.000	N/A	Pass
21	0.002	0.016	N/A	0.002	0.024	N/A	Pass
22	0.000	0.000	N/A	0.000	0.000	N/A	Pass
23	0.002	0.016	N/A	0.002	0.024	N/A	Pass
24	0.000	0.000	N/A	0.000	0.000	N/A	Pass
25	0.001	0.016	N/A	0.002	0.024	N/A	Pass
26	0.000	0.000	N/A	0.001	0.000	N/A	Pass
27	0.001	0.016	N/A	0.001	0.024	N/A	Pass
28	0.000	0.000	N/A	0.001	0.000	N/A	Pass
29	0.001	0.016	N/A	0.001	0.024	N/A	Pass
30	0.000	0.000	N/A	0.001	0.000	N/A	Pass
31	0.000	0.016	N/A	0.001	0.024	N/A	Pass
32	0.000	0.000	N/A	0.000	0.000	N/A	Pass
33	0.000	0.016	N/A	0.001	0.024	N/A	Pass
34	0.000	0.000	N/A	0.000	0.000	N/A	Pass
35	0.000	0.016	N/A	0.001	0.024	N/A	Pass
36	0.000	0.000	N/A	0.000	0.000	N/A	Pass
37	0.000	0.016	N/A	0.001	0.024	N/A	Pass
38	0.000	0.000	N/A	0.001	0.000	N/A	Pass
39	0.000	0.016	N/A	0.001	0.024	N/A	Pass
40	0.000	0.000	N/A	0.001	0.000	N/A	Pass

Note: Dynamic limits were applied for this test. The highest harmonics values in the above table may not occur at the same window as the maximum harmonics/limit ratio.

Harmonics – Class-C per Ed. 5.0 (2018)(Run time)

EUT: AOK-120WiP-NV-L3-00-6570-T5-P-I

Tested by: Molly

Test category: Class-C per Ed. 5.0 (2018) (European limits)

Test Margin: 100

Test date: 25/05/2022

Start time: 11:30:05

End time: 11:32:47

Test duration (min): 2.5

Data file name: CTSMXL_H-000459.cts_data

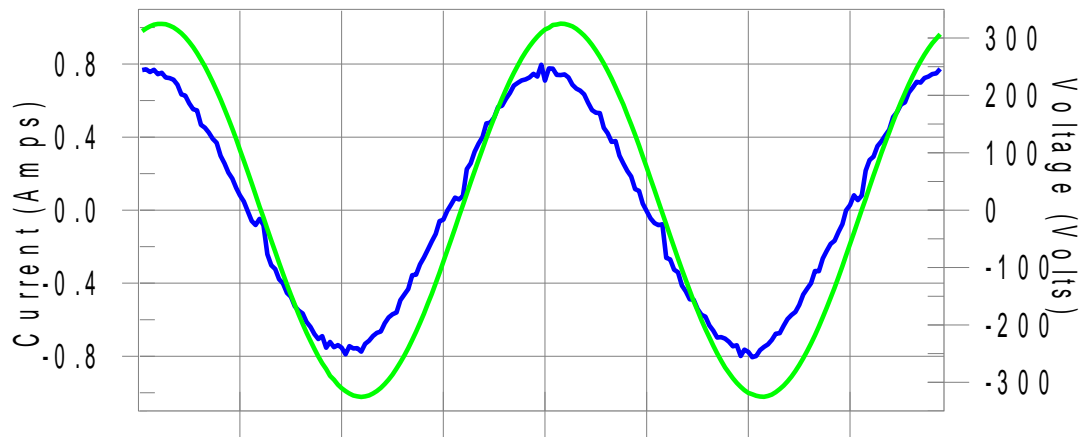
Comment: ON

Remark: XLG-150-H-AB

Test Result: Pass

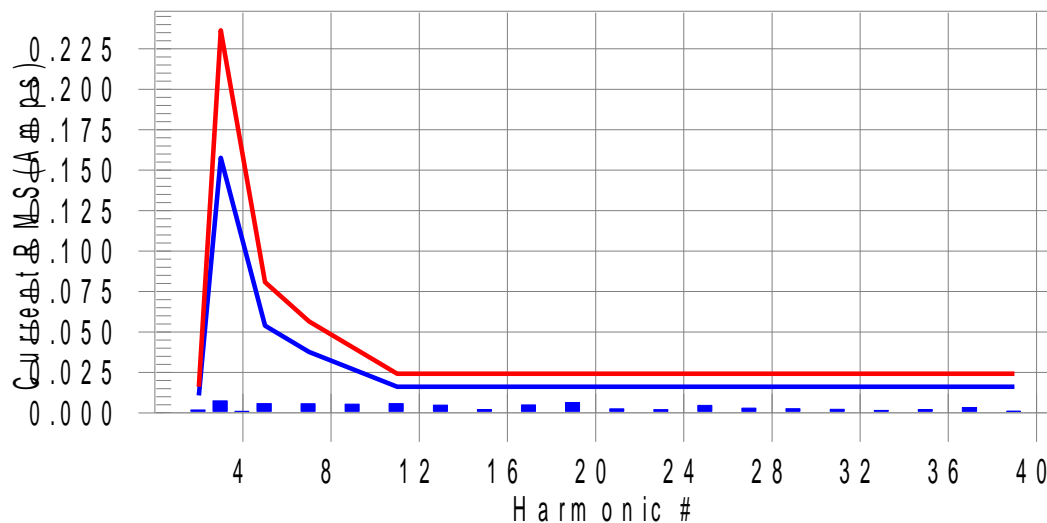
Source qualification: Normal

Current & voltage waveforms



Harmonics and Class C limit line

European Limits



Test result: Pass Worst harmonics H19-27.1% of 150% limit, H19-39.6% of 100% limit.

Current Test Result Summary (Run time)

EUT: AOK-120WiP-NV-L3-00-6570-T5-P-I Tested by: Molly
 Test category: Class-C per Ed. 5.0 (2018) (European limits) Test Margin: 100
 Test date: 25/05/2022 Start time: 11:30:05 End time: 11:32:47
 Test duration (min): 2.5 Data file name: CTSMXL_H-000459.cts_data
 Comment: ON
 Remark: XLG-150-H-AB

Test Result: Pass Source qualification: Normal
 THC(A): 0.019 I-THD(%): 3.5 POHC(A): 0.008 POHC Limit(A): 0.051

Highest parameter values during test:

V _{RMS} (Volts):	230.031	Frequency(Hz):	50.00
I _{Peak} (Amps):	0.931	I _{RMS} (Amps):	0.539
I _{Fund} (Amps):	0.539	Crest Factor:	1.729
Power (Watts):	121.0	Power Factor:	0.975

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.002	0.011	N/A	0.002	0.016	N/A	Pass
3	0.007	0.158	4.7	0.009	0.236	3.8	Pass
4	0.001	0.000	N/A	0.001	0.000	N/A	Pass
5	0.006	0.054	10.6	0.006	0.081	7.5	Pass
6	0.000	0.000	N/A	0.001	0.000	N/A	Pass
7	0.006	0.038	14.9	0.006	0.057	11.0	Pass
8	0.000	0.000	N/A	0.001	0.000	N/A	Pass
9	0.005	0.027	20.2	0.006	0.040	14.0	Pass
10	0.000	0.000	N/A	0.001	0.000	N/A	Pass
11	0.006	0.016	35.4	0.006	0.024	25.0	Pass
12	0.000	0.000	N/A	0.000	0.000	N/A	Pass
13	0.005	0.016	N/A	0.005	0.024	N/A	Pass
14	0.000	0.000	N/A	0.000	0.000	N/A	Pass
15	0.002	0.016	N/A	0.002	0.024	N/A	Pass
16	0.000	0.000	N/A	0.000	0.000	N/A	Pass
17	0.005	0.016	N/A	0.005	0.024	N/A	Pass
18	0.000	0.000	N/A	0.000	0.000	N/A	Pass
19	0.006	0.016	39.6	0.007	0.024	27.1	Pass
20	0.000	0.000	N/A	0.000	0.000	N/A	Pass
21	0.003	0.016	N/A	0.003	0.024	N/A	Pass
22	0.000	0.000	N/A	0.000	0.000	N/A	Pass
23	0.002	0.016	N/A	0.002	0.024	N/A	Pass
24	0.000	0.000	N/A	0.000	0.000	N/A	Pass
25	0.005	0.016	N/A	0.005	0.024	N/A	Pass
26	0.000	0.000	N/A	0.000	0.000	N/A	Pass
27	0.003	0.016	N/A	0.003	0.024	N/A	Pass
28	0.000	0.000	N/A	0.000	0.000	N/A	Pass
29	0.003	0.016	N/A	0.003	0.024	N/A	Pass
30	0.000	0.000	N/A	0.000	0.000	N/A	Pass
31	0.002	0.016	N/A	0.002	0.024	N/A	Pass
32	0.000	0.000	N/A	0.001	0.000	N/A	Pass
33	0.002	0.016	N/A	0.002	0.024	N/A	Pass
34	0.000	0.000	N/A	0.001	0.000	N/A	Pass
35	0.002	0.016	N/A	0.002	0.024	N/A	Pass
36	0.000	0.000	N/A	0.001	0.000	N/A	Pass
37	0.003	0.016	N/A	0.004	0.024	N/A	Pass
38	0.000	0.000	N/A	0.001	0.000	N/A	Pass
39	0.001	0.016	N/A	0.001	0.024	N/A	Pass
40	0.000	0.000	N/A	0.001	0.000	N/A	Pass

Note: Dynamic limits were applied for this test. The highest harmonics values in the above table may not occur at the same window as the maximum harmonics/limit ratio.



China

Voltage Source Verification Data (Run time)

EUT: AOK-120WiP-NV-L3-00-6570-T5-P-I Tested by: Molly
 Test category: Class-C per Ed. 5.0 (2018) (European limits) Test Margin: 100
 Test date: 25/05/2022 Start time: 11:30:05 End time: 11:32:47
 Test duration (min): 2.5 Data file name: CTSMXL_H-000459.cts_data
 Comment: ON
 Remark: XLG-150-H-AB

Test Result: Pass Source qualification: Normal
 Measured source distortion is within the requirements of the standards
 Measurements are compliant with IEC/EN61000-3-2 Ed. 5 & IEC/EN61000-4-7 Ed. 2.1

Highest parameter values during test:

Voltage (Vrms):	230.031	Frequency(Hz):	50.00
I_Peak (Amps):	0.931	I_RMS (Amps):	0.539
I_Fund (Amps):	0.539	Crest Factor:	1.729
Power (Watts):	121.0	Power Factor:	0.975

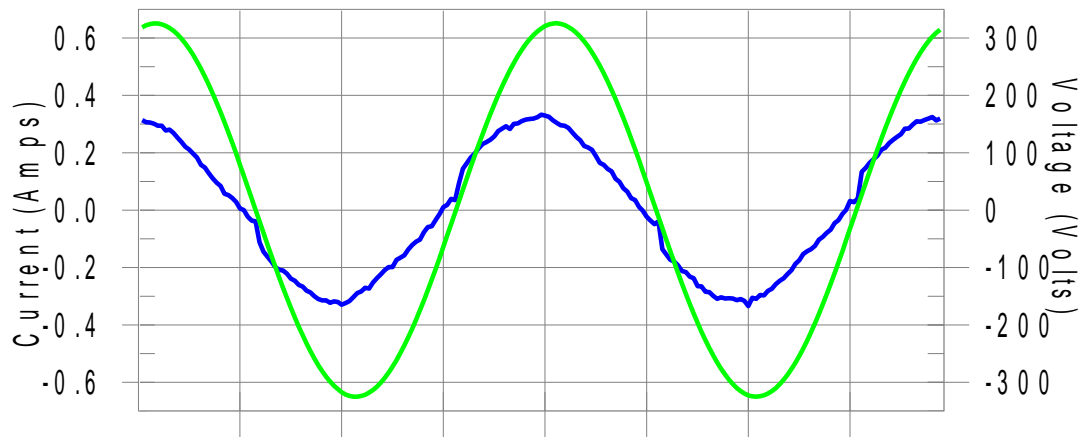
Harm#	Harmonics V-rms	Limit V-rms	% of Limit	Status
2	0.140	0.460	30.33	OK
3	0.186	2.070	8.97	OK
4	0.058	0.460	12.55	OK
5	0.072	0.920	7.78	OK
6	0.028	0.460	6.15	OK
7	0.064	0.690	9.26	OK
8	0.026	0.460	5.59	OK
9	0.035	0.460	7.50	OK
10	0.022	0.460	4.85	OK
11	0.032	0.230	13.79	OK
12	0.019	0.230	8.12	OK
13	0.028	0.230	12.34	OK
14	0.021	0.230	9.02	OK
15	0.019	0.230	8.45	OK
16	0.018	0.230	7.85	OK
17	0.032	0.230	13.97	OK
18	0.017	0.230	7.36	OK
19	0.034	0.230	14.57	OK
20	0.031	0.230	13.39	OK
21	0.025	0.230	10.71	OK
22	0.017	0.230	7.46	OK
23	0.028	0.230	12.18	OK
24	0.017	0.230	7.22	OK
25	0.031	0.230	13.59	OK
26	0.017	0.230	7.38	OK
27	0.021	0.230	9.13	OK
28	0.016	0.230	7.14	OK
29	0.023	0.230	10.04	OK
30	0.018	0.230	7.74	OK
31	0.024	0.230	10.43	OK
32	0.015	0.230	6.54	OK
33	0.021	0.230	9.15	OK
34	0.019	0.230	8.08	OK
35	0.023	0.230	10.18	OK
36	0.018	0.230	7.80	OK
37	0.025	0.230	10.76	OK
38	0.021	0.230	9.29	OK
39	0.022	0.230	9.64	OK
40	0.024	0.230	10.61	OK

Harmonics – Class-C per Ed. 5.0 (2018)(Run time)

EUT: AOK-50WiPS-NVS-L3-00-6580-T4-A Tested by: JACOB
 Test category: Class-C per Ed. 5.0 (2018) (European limits) Test Margin: 100
 Test date: 22/05/2022 Start time: 10:40:54 End time: 10:43:37
 Test duration (min): 2.5 Data file name: CTSMXL_H-000395.cts_data
 Comment: ON
 Remark: SS-50VA-56/B

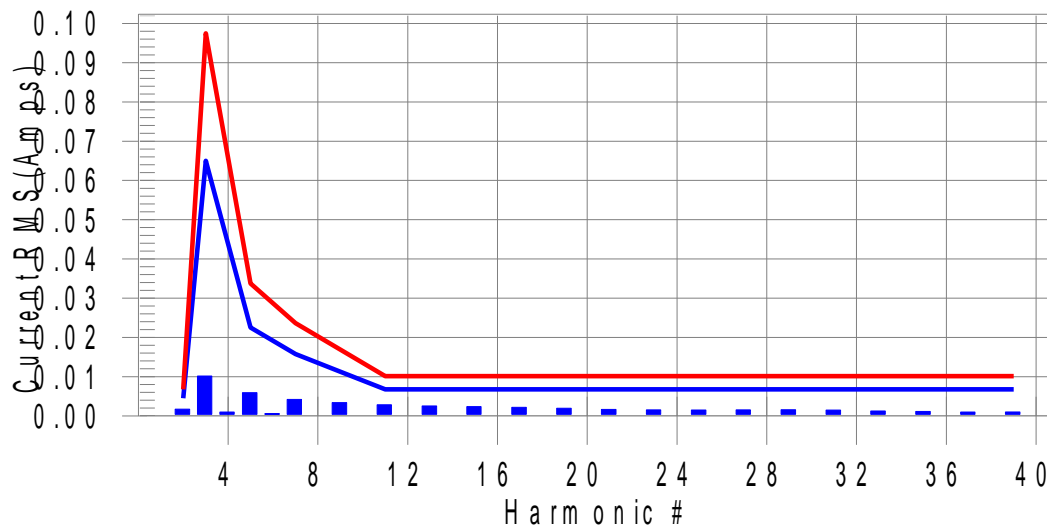
Test Result: Pass Source qualification: Normal

Current & voltage waveforms



Harmonics and Class C limit line

European Limits



Test result: Pass Worst harmonics H5-18.3% of 150% limit, H5-26.3% of 100% limit.

Current Test Result Summary (Run time)

EUT: AOK-50WiPS-NVS-L3-00-6580-T4-A Tested by: JACOB
 Test category: Class-C per Ed. 5.0 (2018) (European limits) Test Margin: 100
 Test date: 22/05/2022 Start time: 10:40:54 End time: 10:43:37
 Test duration (min): 2.5 Data file name: CTSMXL_H-000395.cts_data
 Comment: ON
 Remark: SS-50VA-56/B

Test Result: Pass Source qualification: Normal
 THC(A): 0.015 I-THD(%): 6.6 POHC(A): 0.004 POHC Limit(A): 0.021

Highest parameter values during test:

V _{RMS} (Volts):	230.038	Frequency(Hz):	50.00
I _{Peak} (Amps):	0.347	I _{RMS} (Amps):	0.226
I _{Fund} (Amps):	0.225	Crest Factor:	1.543
Power (Watts):	49.9	Power Factor:	0.962

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.002	0.005	N/A	0.002	0.007	N/A	Pass
3	0.010	0.065	15.7	0.012	0.097	12.0	Pass
4	0.001	0.000	N/A	0.002	0.000	N/A	Pass
5	0.006	0.023	26.3	0.006	0.034	18.3	Pass
6	0.001	0.000	N/A	0.002	0.000	N/A	Pass
7	0.004	0.016	N/A	0.005	0.024	N/A	Pass
8	0.000	0.000	N/A	0.001	0.000	N/A	Pass
9	0.003	0.011	N/A	0.004	0.017	N/A	Pass
10	0.000	0.000	N/A	0.000	0.000	N/A	Pass
11	0.003	0.007	N/A	0.003	0.010	N/A	Pass
12	0.000	0.000	N/A	0.000	0.000	N/A	Pass
13	0.003	0.007	N/A	0.003	0.010	N/A	Pass
14	0.000	0.000	N/A	0.000	0.000	N/A	Pass
15	0.002	0.007	N/A	0.003	0.010	N/A	Pass
16	0.000	0.000	N/A	0.000	0.000	N/A	Pass
17	0.002	0.007	N/A	0.003	0.010	N/A	Pass
18	0.000	0.000	N/A	0.000	0.000	N/A	Pass
19	0.002	0.007	N/A	0.002	0.010	N/A	Pass
20	0.000	0.000	N/A	0.000	0.000	N/A	Pass
21	0.002	0.007	N/A	0.002	0.010	N/A	Pass
22	0.000	0.000	N/A	0.000	0.000	N/A	Pass
23	0.002	0.007	N/A	0.002	0.010	N/A	Pass
24	0.000	0.000	N/A	0.000	0.000	N/A	Pass
25	0.002	0.007	N/A	0.002	0.010	N/A	Pass
26	0.000	0.000	N/A	0.000	0.000	N/A	Pass
27	0.002	0.007	N/A	0.002	0.010	N/A	Pass
28	0.000	0.000	N/A	0.000	0.000	N/A	Pass
29	0.002	0.007	N/A	0.002	0.010	N/A	Pass
30	0.000	0.000	N/A	0.000	0.000	N/A	Pass
31	0.001	0.007	N/A	0.002	0.010	N/A	Pass
32	0.000	0.000	N/A	0.000	0.000	N/A	Pass
33	0.001	0.007	N/A	0.001	0.010	N/A	Pass
34	0.000	0.000	N/A	0.000	0.000	N/A	Pass
35	0.001	0.007	N/A	0.001	0.010	N/A	Pass
36	0.000	0.000	N/A	0.000	0.000	N/A	Pass
37	0.001	0.007	N/A	0.001	0.010	N/A	Pass
38	0.000	0.000	N/A	0.000	0.000	N/A	Pass
39	0.001	0.007	N/A	0.001	0.010	N/A	Pass
40	0.000	0.000	N/A	0.000	0.000	N/A	Pass

Note: Dynamic limits were applied for this test. The highest harmonics values in the above table may not occur at the same window as the maximum harmonics/limit ratio.

Voltage Source Verification Data (Run time)

EUT: AOK-50WiPS-NVS-L3-00-6580-T4-A Tested by: JACOB
 Test category: Class-C per Ed. 5.0 (2018) (European limits) Test Margin: 100
 Test date: 22/05/2022 Start time: 10:40:54 End time: 10:43:37
 Test duration (min): 2.5 Data file name: CTSMXL_H-000395.cts_data
 Comment: ON
 Remark: SS-50VA-56/B

Test Result: Pass Source qualification: Normal
 Measured source distortion is within the requirements of the standards
 Measurements are compliant with IEC/EN61000-3-2 Ed. 5 & IEC/EN61000-4-7 Ed. 2.1

Highest parameter values during test:

Voltage (Vrms):	230.038	Frequency(Hz):	50.00
I_Peak (Amps):	0.347	I_RMS (Amps):	0.226
I_Fund (Amps):	0.225	Crest Factor:	1.543
Power (Watts):	49.9	Power Factor:	0.962

Harm#	Harmonics V-rms	Limit V-rms	% of Limit	Status
2	0.153	0.460	33.24	OK
3	0.188	2.070	9.06	OK
4	0.056	0.460	12.27	OK
5	0.059	0.920	6.39	OK
6	0.023	0.460	5.09	OK
7	0.053	0.690	7.74	OK
8	0.018	0.460	3.82	OK
9	0.029	0.460	6.36	OK
10	0.017	0.460	3.75	OK
11	0.020	0.230	8.91	OK
12	0.011	0.230	4.73	OK
13	0.017	0.230	7.58	OK
14	0.011	0.230	4.77	OK
15	0.016	0.230	6.99	OK
16	0.011	0.230	4.82	OK
17	0.016	0.230	7.05	OK
18	0.008	0.230	3.34	OK
19	0.023	0.230	9.93	OK
20	0.019	0.230	8.32	OK
21	0.015	0.230	6.52	OK
22	0.009	0.230	3.77	OK
23	0.016	0.230	7.17	OK
24	0.013	0.230	5.48	OK
25	0.015	0.230	6.61	OK
26	0.009	0.230	3.93	OK
27	0.011	0.230	4.90	OK
28	0.007	0.230	3.20	OK
29	0.016	0.230	6.84	OK
30	0.008	0.230	3.39	OK
31	0.016	0.230	6.79	OK
32	0.008	0.230	3.62	OK
33	0.011	0.230	4.74	OK
34	0.007	0.230	2.98	OK
35	0.013	0.230	5.76	OK
36	0.006	0.230	2.68	OK
37	0.011	0.230	4.90	OK
38	0.007	0.230	3.09	OK
39	0.012	0.230	5.33	OK
40	0.016	0.230	7.07	OK

Harmonics – Class-C per Ed. 5.0 (2018)(Run time)

EUT: AOK-60WiPS-NVS-L3-00-6580-T4-A

Tested by: Molly

Test category: Class-C per Ed. 5.0 (2018) (European limits)

Test Margin: 100

Test date: 25/05/2022

Start time: 09:25:34

End time: 09:28:16

Test duration (min): 2.5

Data file name: CTSMXL_H-000456.cts_data

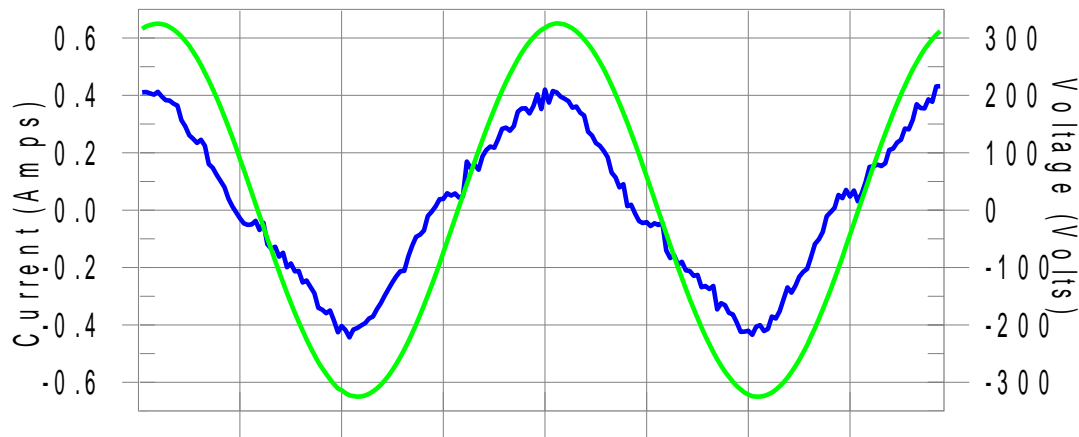
Comment: ON

Remark: SS-60VA-L50B

Test Result: Pass

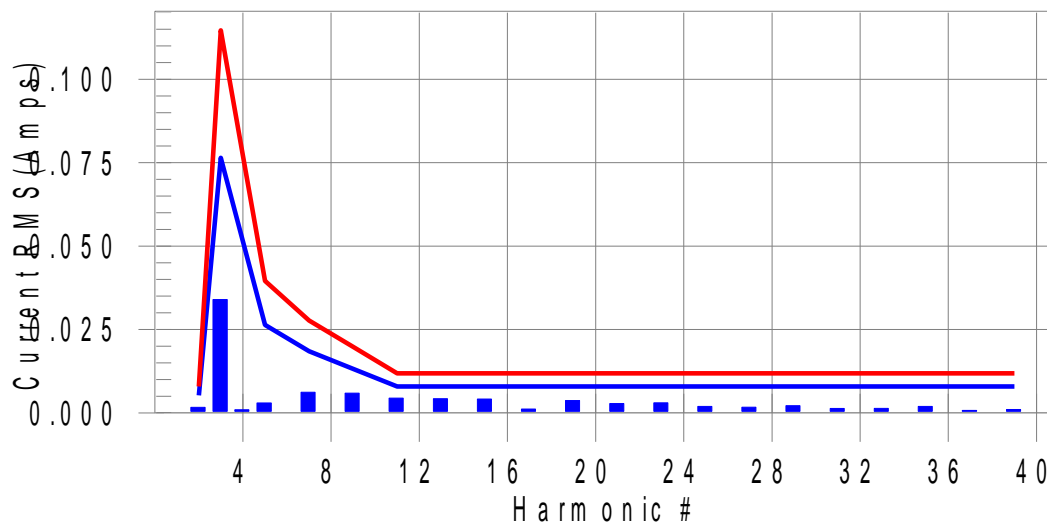
Source qualification: Normal

Current & voltage waveforms



Harmonics and Class C limit line

European Limits



Test result: Pass Worst harmonics H9-32.6% of 150% limit, H9-44.9% of 100% limit.

Current Test Result Summary (Run time)

EUT: AOK-60WiPS-NVS-L3-00-6580-T4-A Tested by: Molly
 Test category: Class-C per Ed. 5.0 (2018) (European limits) Test Margin: 100
 Test date: 25/05/2022 Start time: 09:25:34 End time: 09:28:16
 Test duration (min): 2.5 Data file name: CTSMXL_H-000456.cts_data
 Comment: ON
 Remark: SS-60VA-L50B

Test Result: Pass Source qualification: Normal
 THC(A): 0.037 I-THD(%): 13.9 POHC(A): 0.006 POHC Limit(A): 0.025

Highest parameter values during test:

V _{RMS} (Volts):	230.019	Frequency(Hz):	50.00
I _{Peak} (Amps):	0.581	I _{RMS} (Amps):	0.267
I _{Fund} (Amps):	0.264	Crest Factor:	2.185
Power (Watts):	59.2	Power Factor:	0.966

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.002	0.005	N/A	0.002	0.008	N/A	Pass
3	0.034	0.076	44.5	0.035	0.115	30.7	Pass
4	0.001	0.000	N/A	0.001	0.000	N/A	Pass
5	0.003	0.026	N/A	0.004	0.040	N/A	Pass
6	0.000	0.000	N/A	0.001	0.000	N/A	Pass
7	0.006	0.018	33.6	0.007	0.028	25.5	Pass
8	0.000	0.000	N/A	0.001	0.000	N/A	Pass
9	0.006	0.013	44.9	0.006	0.020	32.6	Pass
10	0.000	0.000	N/A	0.001	0.000	N/A	Pass
11	0.004	0.008	N/A	0.005	0.012	N/A	Pass
12	0.000	0.000	N/A	0.000	0.000	N/A	Pass
13	0.004	0.008	N/A	0.004	0.012	N/A	Pass
14	0.000	0.000	N/A	0.000	0.000	N/A	Pass
15	0.004	0.008	N/A	0.004	0.012	N/A	Pass
16	0.000	0.000	N/A	0.000	0.000	N/A	Pass
17	0.001	0.008	N/A	0.001	0.012	N/A	Pass
18	0.000	0.000	N/A	0.001	0.000	N/A	Pass
19	0.004	0.008	N/A	0.004	0.012	N/A	Pass
20	0.000	0.000	N/A	0.001	0.000	N/A	Pass
21	0.003	0.008	N/A	0.003	0.012	N/A	Pass
22	0.000	0.000	N/A	0.000	0.000	N/A	Pass
23	0.003	0.008	N/A	0.003	0.012	N/A	Pass
24	0.000	0.000	N/A	0.000	0.000	N/A	Pass
25	0.002	0.008	N/A	0.002	0.012	N/A	Pass
26	0.000	0.000	N/A	0.000	0.000	N/A	Pass
27	0.002	0.008	N/A	0.002	0.012	N/A	Pass
28	0.000	0.000	N/A	0.000	0.000	N/A	Pass
29	0.002	0.008	N/A	0.002	0.012	N/A	Pass
30	0.000	0.000	N/A	0.000	0.000	N/A	Pass
31	0.001	0.008	N/A	0.002	0.012	N/A	Pass
32	0.000	0.000	N/A	0.000	0.000	N/A	Pass
33	0.001	0.008	N/A	0.002	0.012	N/A	Pass
34	0.000	0.000	N/A	0.000	0.000	N/A	Pass
35	0.002	0.008	N/A	0.002	0.012	N/A	Pass
36	0.000	0.000	N/A	0.001	0.000	N/A	Pass
37	0.001	0.008	N/A	0.001	0.012	N/A	Pass
38	0.000	0.000	N/A	0.001	0.000	N/A	Pass
39	0.001	0.008	N/A	0.001	0.012	N/A	Pass
40	0.000	0.000	N/A	0.001	0.000	N/A	Pass

Note: Dynamic limits were applied for this test. The highest harmonics values in the above table may not occur at the same window as the maximum harmonics/limit ratio.

Voltage Source Verification Data (Run time)

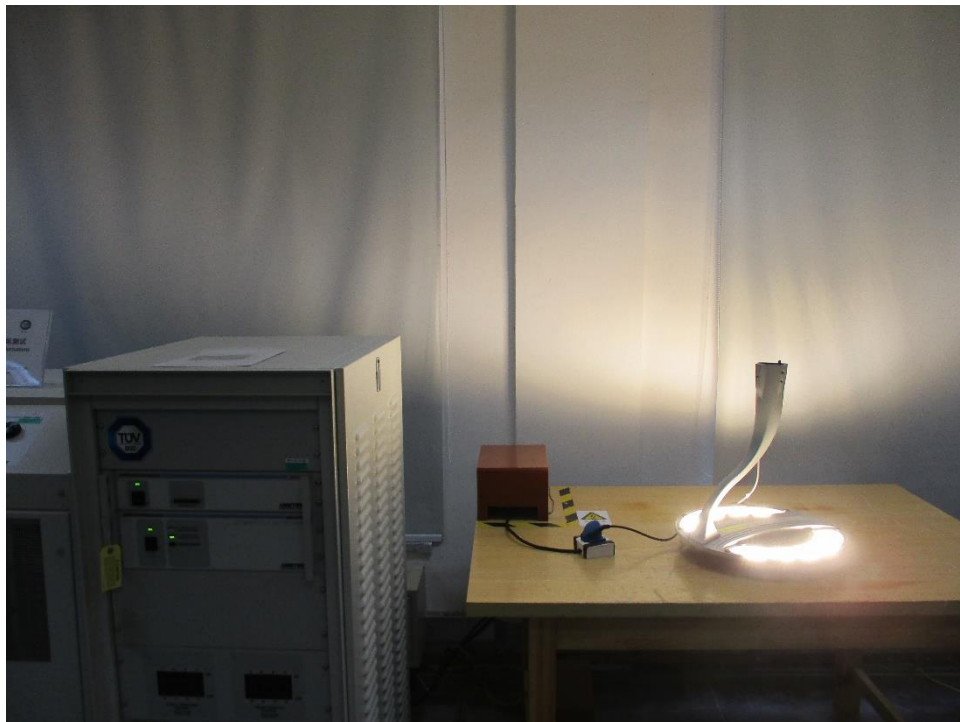
EUT: AOK-60WiPS-NVS-L3-00-6580-T4-A Tested by: Molly
 Test category: Class-C per Ed. 5.0 (2018) (European limits) Test Margin: 100
 Test date: 25/05/2022 Start time: 09:25:34 End time: 09:28:16
 Test duration (min): 2.5 Data file name: CTSMXL_H-000456.cts_data
 Comment: ON
 Remark: SS-60VA-L50B

Test Result: Pass Source qualification: Normal
 Measured source distortion is within the requirements of the standards
 Measurements are compliant with IEC/EN61000-3-2 Ed. 5 & IEC/EN61000-4-7 Ed. 2.1

Highest parameter values during test:

Voltage (Vrms):	230.019	Frequency(Hz):	50.00
I_Peak (Amps):	0.581	I_RMS (Amps):	0.267
I_Fund (Amps):	0.264	Crest Factor:	2.185
Power (Watts):	59.2	Power Factor:	0.966

Harm#	Harmonics V-rms	Limit V-rms	% of Limit	Status
2	0.154	0.460	33.39	OK
3	0.177	2.070	8.54	OK
4	0.055	0.460	11.97	OK
5	0.061	0.920	6.61	OK
6	0.028	0.460	6.12	OK
7	0.050	0.690	7.26	OK
8	0.024	0.460	5.17	OK
9	0.025	0.460	5.40	OK
10	0.024	0.460	5.16	OK
11	0.032	0.230	14.08	OK
12	0.022	0.230	9.49	OK
13	0.027	0.230	11.94	OK
14	0.017	0.230	7.41	OK
15	0.020	0.230	8.84	OK
16	0.019	0.230	8.45	OK
17	0.023	0.230	10.21	OK
18	0.018	0.230	7.79	OK
19	0.023	0.230	10.03	OK
20	0.028	0.230	12.02	OK
21	0.021	0.230	9.13	OK
22	0.016	0.230	6.92	OK
23	0.023	0.230	9.88	OK
24	0.015	0.230	6.44	OK
25	0.018	0.230	7.84	OK
26	0.017	0.230	7.27	OK
27	0.022	0.230	9.44	OK
28	0.018	0.230	7.79	OK
29	0.022	0.230	9.52	OK
30	0.016	0.230	7.02	OK
31	0.020	0.230	8.68	OK
32	0.015	0.230	6.64	OK
33	0.022	0.230	9.49	OK
34	0.018	0.230	7.90	OK
35	0.022	0.230	9.40	OK
36	0.018	0.230	7.66	OK
37	0.021	0.230	9.16	OK
38	0.016	0.230	6.76	OK
39	0.018	0.230	8.02	OK
40	0.028	0.230	12.34	OK



Test Setup

2.4.8 Test Location

This test was carried out in Harmonic Flicker Test area.

2.5 Electrostatic discharge immunity test

2.5.1 Specification Reference

EN 61547:2009, Clause 5.2

2.5.2 Equipment Under Test

AOK-50WiP-NV-L3-00-6570-T5-P-I, AOK-75WiP-NV-L3-00-6570-T5-P-I,
AOK-120WiP-NV-L3-00-6570-T5-P-I, AOK-50WiPS-NVS-L3-00-6580-T4-A,
AOK-60WiPS-NVS-L3-00-6580-T4-A

2.5.3 Date of Test

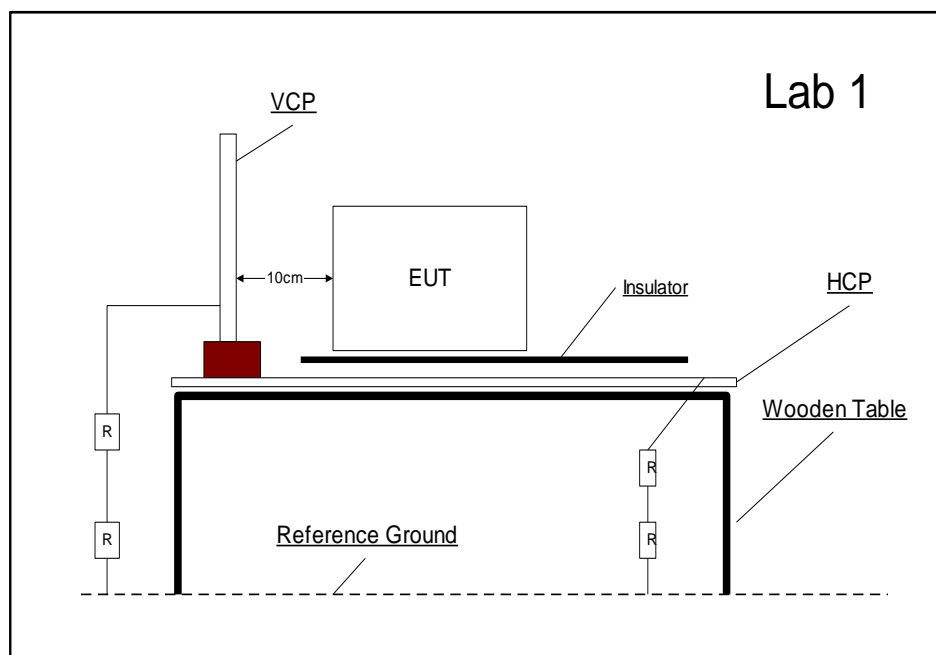
2019-01-08; 2020-01-17; 2020-04-09, 2022-05-25

2.5.4 Test Method

The equipment under test including associated cabling was configured on but insulated from, using a 0.5mm isolator, a horizontal coupling plane fitted to the top of a 0.8m non-conductive table for table-top equipment; and on a 0.1m insulated support for floor standing equipment; above a ground reference plane all within a test laboratory.

Using the air discharge method for non-metallic parts, contact discharge method for metallic parts with both vertical and horizontal couple plane discharge methods for the sides of the equipment under test, the required electrostatic discharge voltage levels in both voltage polarities were applied at the detailed pulse repartition rate.

During this testing any anomalies in the equipment under tests performance was recorded.



2.5.5 Environmental Conditions

Ambient Temperature	23.8 – 24.2 °C
Relative Humidity	49.7 – 50.8 %
Atmospheric Pressure	1009.0 mbar

2.5.6 Specification Limits

Required Test Levels				Performance Criteria
Discharge type	Discharge Level (kV)		Number of discharges per location (each polarity)	
	Positive	Negative		
Air – Direct	2, 4 and 8	2, 4 and 8	<10>	B
Contact – Direct	2 and 4	2 and 4	<10>	B
Contact – Indirect	2 and 4	2 and 4	<10>	B

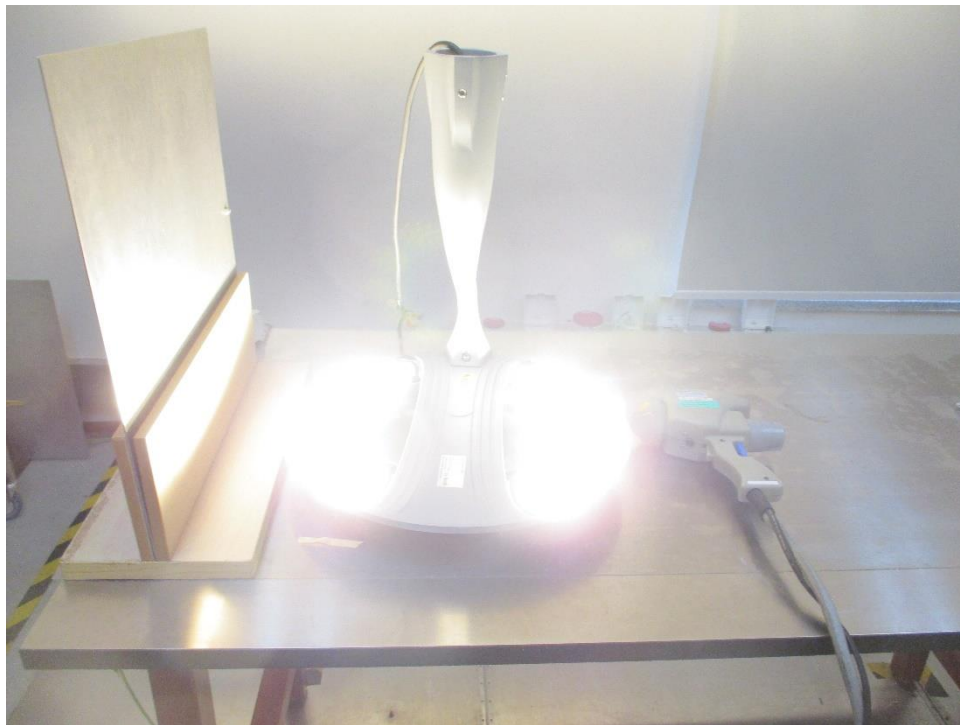
2.5.7 Test Results

Results for Configuration and Mode: AC Powered/ ON.

Performance assessment of the EUT made during this test: Pass.

Detailed results are shown below.

ID	Test Point	Discharge	Results									
			2kV		4kV		6kV		8kV		15kV	
			+	-	+	-	+	-	+	-	+	-
	HCP	Contact	N/A	N/A	A	A	N/A	N/A	N/A	N/A	N/A	N/A
	VCP	Contact	N/A	N/A	A	A	N/A	N/A	N/A	N/A	N/A	N/A
	Each conductive location touchable by hand	Contact	N/A	N/A	A	A	N/A	N/A	N/A	N/A	N/A	N/A
	Each nonconductive location touchable by hand	Air	A	A	A	A	N/A	N/A	A	A	N/A	N/A
N/A		Not Appliance										
Remark		Nil										



Test Setup

2.5.8 Test Location

This test was carried out in ESD room.

2.6 Radiated, radio-frequency, electromagnetic field immunity test

2.6.1 Specification Reference

EN 61547:2009, Clause 5.3

2.6.2 Equipment Under Test

AOK-50WiP-NV-L3-00-6570-T5-P-I, AOK-75WiP-NV-L3-00-6570-T5-P-I,
AOK-120WiP-NV-L3-00-6570-T5-P-I, AOK-50WiPS-NVS-L3-00-6580-T4-A,
AOK-60WiPS-NVS-L3-00-6580-T4-A

2.6.3 Date of Test

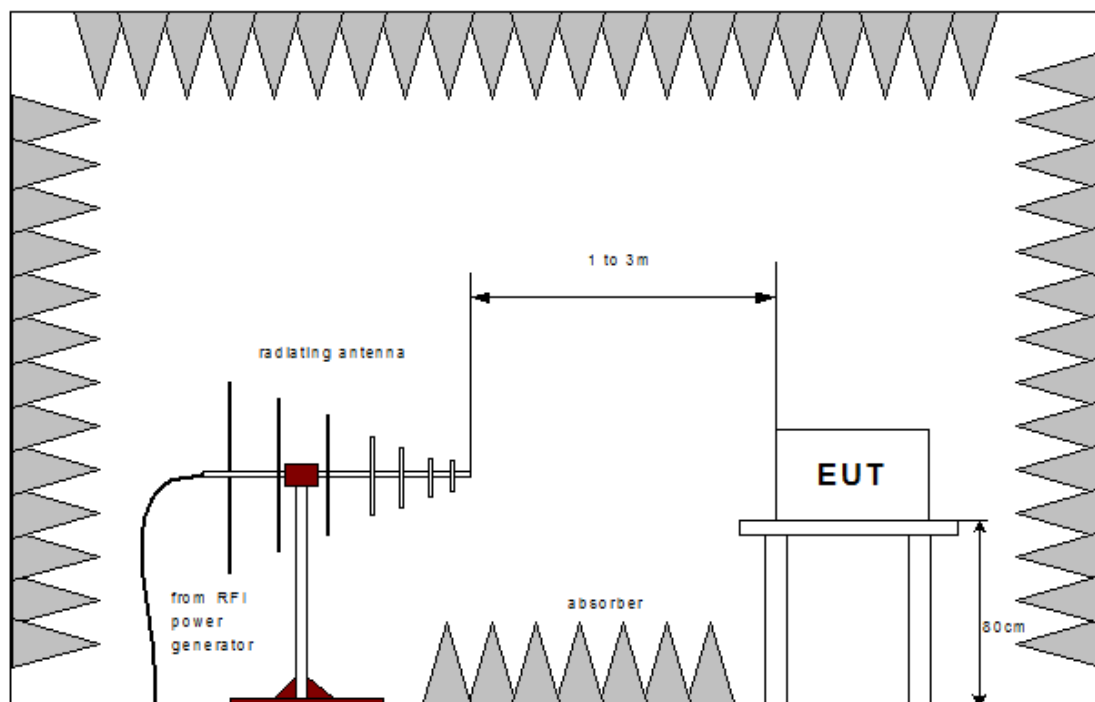
2019-01-04; 2020-01-17; 2020-04-09, 2022-05-23

2.6.4 Test Method

The equipment under test including associated cabling was configured, on a 0.8 m non-conductive table for table-top equipment and on a 0.1 m insulated support for floor standing equipment; with a pre-calibrated semi anechoic chamber.

All four side of the equipment under test were subjected to the required RF field strength, modulated as described, swept over the frequency range of test with the antenna positioned in both horizontal and vertical polarizations.

During this testing any anomalies in the equipment under tests performance was recorded.





China

2.6.5 Environmental Conditions

Ambient Temperature 23.7 °C
 Relative Humidity 46.5 %
 Atmospheric Pressure 1014.0 mbar

2.6.6 Specification Limits

Required Test Levels					Performance Criteria
Frequency Range (MHz)	Level (V/m)	Modulation	Step Size (%)	Dwell (s)	
80 to 1000	3	AM (80 %, 1 kHz, sine wave)	1	1	A
Note 1. EUT powered at one of the Nominal input voltages and frequencies					

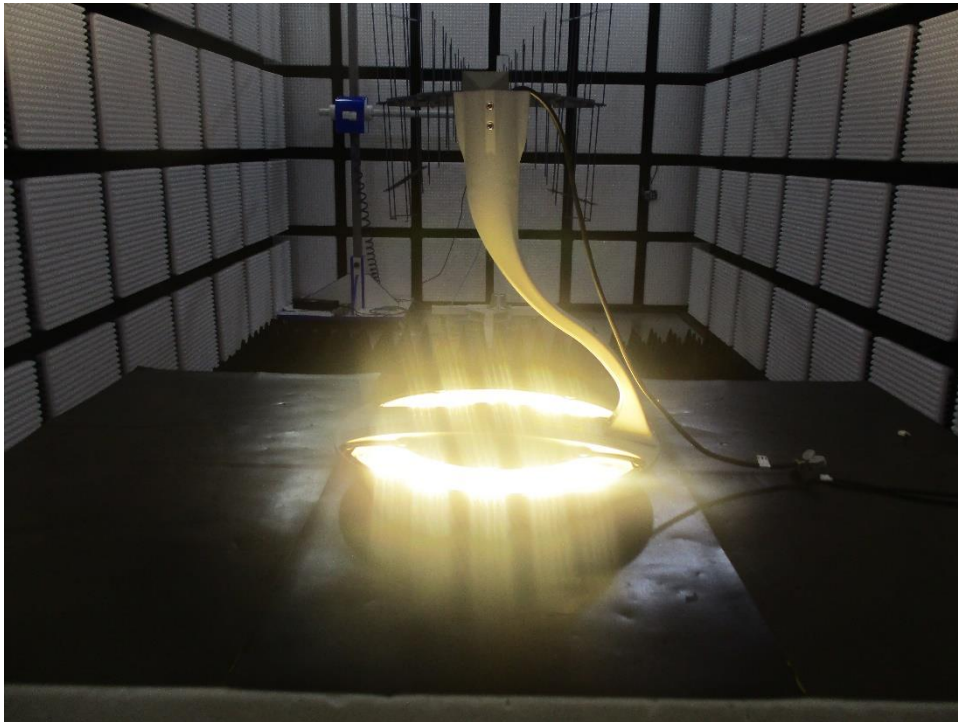
2.6.7 Test Results

Results for Configuration and Mode: AC Powered/ ON.

Performance assessment of the EUT made during this test: Pass.

Detailed results are shown below.

Tabulated Results for RF Electromagnetic Field 80 - 1000 MHz				
Side of the equipment under test	Antenna polarization	Test Level	Dwell Time	Result
All sides	horizontal	3 V/m	1 s	A
All sides	vertical	3 V/m	1 s	A
Remark	NIL			



Test Setup

2.6.8 Test Location

This test was carried out in 3m anechoic chamber.

2.7 Electrical fast transient /burst immunity test

2.7.1 Specification Reference

EN 61547:2009, Clause 5.5

2.7.2 Equipment Under Test

AOK-50WiP-NV-L3-00-6570-T5-P-I, AOK-75WiP-NV-L3-00-6570-T5-P-I,
AOK-120WiP-NV-L3-00-6570-T5-P-I, AOK-50WiPS-NVS-L3-00-6580-T4-A,
AOK-60WiPS-NVS-L3-00-6580-T4-A

2.7.3 Date of Test

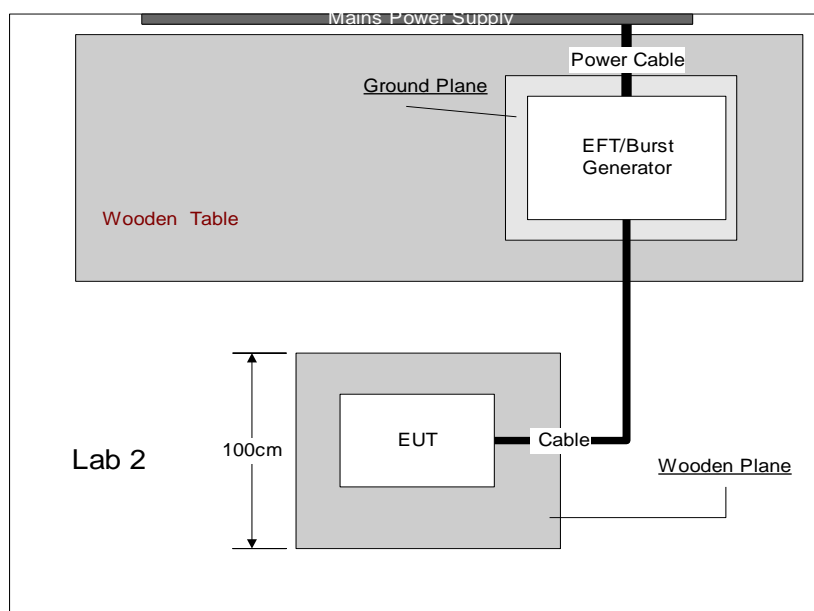
2019-01-04; 2020-01-17; 2020-04-09, 2022-05-24

2.7.4 Test Method

The equipment under test including associated cabling was configured on but insulated from, using a 0.1 m isolator, a horizontal coupling plane fitted to the top of a 0.8 m non-conductive table for table-top equipment; and on a 0.1 m insulated support for floor standing equipment; above a ground reference plane all within a test laboratory.

Using a CDN for power ports, capacitive coupling clamp for signal and control ports and a 33nF coupling capacitor for earth ports, the required fast transient burst voltage levels in both voltage polarities were applied at the detailed pulse repartition rate and duration of test.

During this testing any anomalies in the equipment under tests performance was recorded.





China

2.7.5 Environmental Conditions

Ambient Temperature 23.1 °C
 Relative Humidity 52.1 %
 Atmospheric Pressure 1020.0 mbar

2.7.6 Specification Limits

Required Test Levels at input and output a.c. power port					Performance Criteria
Line Under Test	Level (kV)	Repetition Rate (kHz)	Test Duration	Coupling Method	
AC Power Port	± 1	5 kHz	1 min per polarity	Direct	B
Note 1. EUT powered at one of the Nominal input voltages and frequencies					

2.7.7 Test Results

Results for Configuration and Mode: AC Powered/ ON.

Performance assessment of the EUT made during this test: Pass.

Detailed results are shown below.

Tabulated Results for Fast Transient Burst Immunity					
Line under test	Test Level (V/m)	Repetition Rate	Test Duration	Coupling Method	Result
power line	± 1.0 kV	5 kHz	2 min	CDN	A
Remark	NIL				



Test Setup

2.7.8 Test Location

This test was carried out in EMS Test Location.

2.8 Immunity to conducted disturbances, induced by radio-frequency fields

2.8.1 Specification Reference

EN 61547:2009, Clause 5.6

2.8.2 Equipment Under Test

AOK-50WiP-NV-L3-00-6570-T5-P-I, AOK-75WiP-NV-L3-00-6570-T5-P-I,
AOK-120WiP-NV-L3-00-6570-T5-P-I, AOK-50WiPS-NVS-L3-00-6580-T4-A,
AOK-60WiPS-NVS-L3-00-6580-T4-A

2.8.3 Date of Test

2019-01-04; 2020-01-17; 2020-04-09, 2022-05-24

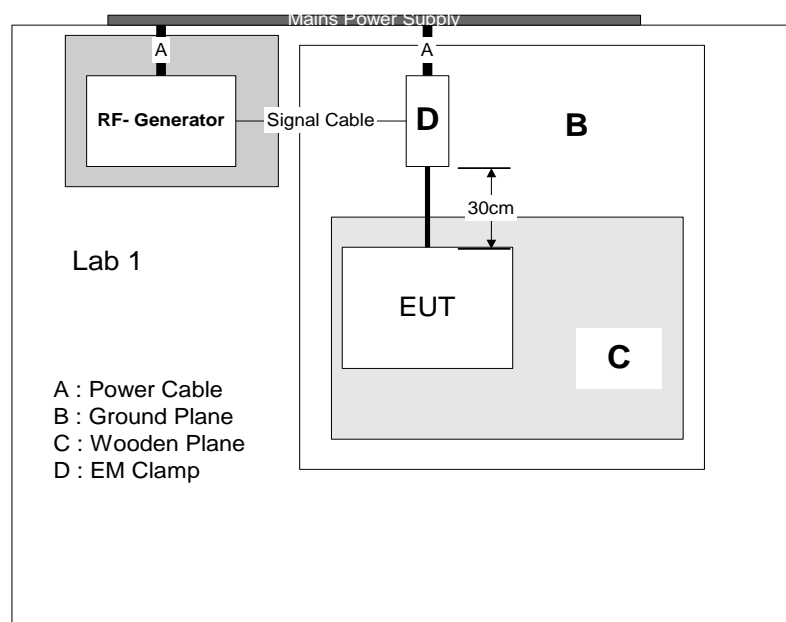
2.8.4 Test Method

The equipment under test was configured, on but insulated from, using a 0.1 m isolator, a horizontal coupling plane fitted to the top of a 0.8 m non-conductive table for table-top equipment; and on a 0.1 m insulated support for floor standing equipment; above a ground reference plane all within a test laboratory.

All associated cabling was configured, on but insulated from, using a 50 mm isolator, the same horizontal coupling plane as the equipment under test.

Using CDNs, EM Clamps or current clamps as appropriate, the power ports and applicable signal and control ports were subjected to the required, pre calibrated RF injected signal strength, modulated as described, swept over the frequency range of test.

During this testing any anomalies in the equipment under tests performance was recorded.





China

2.8.5 Environmental Conditions

Ambient Temperature 23.1 °C
 Relative Humidity 52.0 %
 Atmospheric Pressure 1019.0 mbar

2.8.6 Specification Limits

Required Test Levels at input and output a.c. power ports						Performance Criteria
Line Under Test	Frequency Range (MHz)	Level (V)	Modulation	Step Size (%)	Dwell (s)	
AC power ports	0.15 to 80	3	AM (80 %,1 kHz, sine wave)	1	1	A
Note Only applicable to ports interfacing with cables whose total length, according to the manufacturer's specification, may exceed 3m						

2.8.7 Test Results

Results for Configuration and Mode: AC Powered/ ON.

Performance assessment of the EUT made during this test: Pass.

Detailed results are shown below.

Tabulated Results for Injected current						
Line under test	Test Level	Step	Dwell Time	Coupling Method	Modulation	Result
power line	3V	1%	1s	CDN	1KHZ 80%	A
Remark	NIL					



Test Setup

2.8.8 Test Location

This test was carried out in EMS Test Location.

2.9 Surge immunity test

2.9.1 Specification Reference

EN 61547:2009, Clause 5.7

2.9.2 Equipment Under Test

AOK-50WiP-NV-L3-00-6570-T5-P-I, AOK-75WiP-NV-L3-00-6570-T5-P-I,
AOK-120WiP-NV-L3-00-6570-T5-P-I, AOK-50WiPS-NVS-L3-00-6580-T4-A,
AOK-60WiPS-NVS-L3-00-6580-T4-A

2.9.3 Date of Test

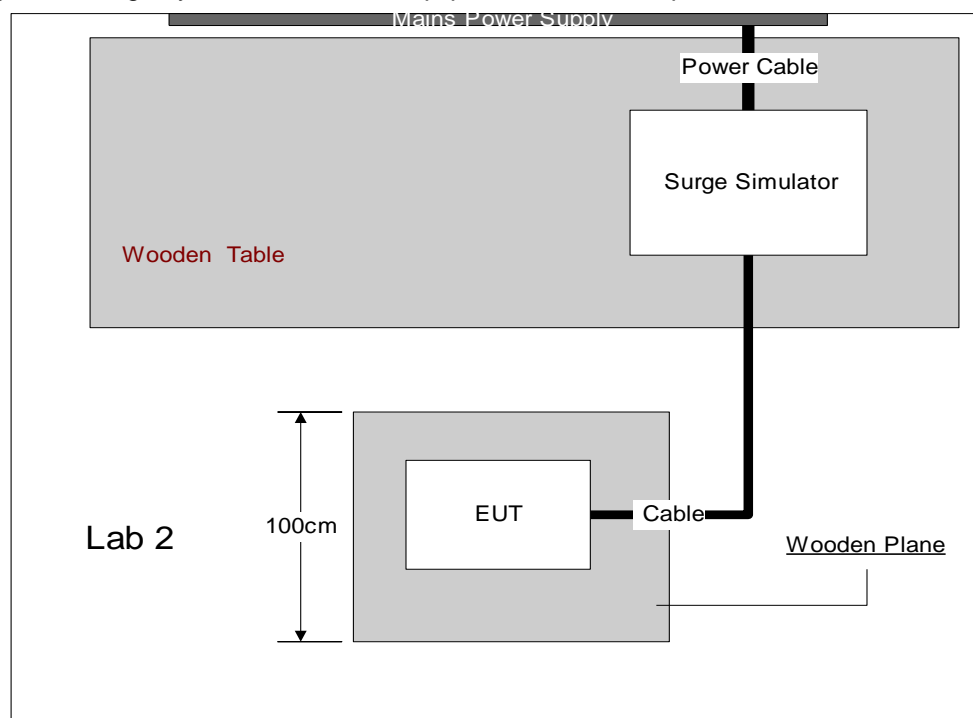
2019-01-04; 2020-01-17; 2020-04-09, 2022-05-26

2.9.4 Test Method

The equipment under test including associated cabling was configured, on a 0.8 m non-conductive table for table-top equipment and on a 0.1 m insulated support for floor standing equipment above a ground reference plane all within a test laboratory.

Using CDNs for power ports and appropriate coupling methods for applicable signal and control ports, the required number of surges was applied for each surge voltage level using both positive and negative surge voltage polarities. Surges were applied at the power line frequency phase angles and repartition rates detailed.

During this testing any anomalies in the equipment under tests performance was recorded.



2.9.5 Environmental Conditions

Ambient Temperature	24.2 °C
Relative Humidity	51.6 %
Atmospheric Pressure	1008.0 mbar

2.9.6 Specification Limits

Characteristics	Test Levels			Performance Criteria
	Device			
	Self-ballasted lamps And semi-luminaires	Luminaires and independent auxiliaries		
		Input power		
		≤25W	>25W	
Wave- shape data	1.2/50 μs	1.2/50 μs	1.2/50 μs	B
Test levels line to line	± 0.5 kV	± 0.5 kV	± 1.0 kV	
line to ground	±1.0 kV	±1.0 kV	±2.0 kV	
Note In addition to the specified test level, all lower levels as detailed in IEC 61000-4-5 should also be satisfied.				

2.9.7 Test Results

Results for Configuration and Mode: AC Powered/ ON.

Performance assessment of the EUT made during this test: Pass.

Detailed results are shown below.

Tabulated Results for Surge Immunity (Power Ports)							
Line Name	Coupling	Level	Polarity	Phase Angle	No of Pulses	Repetition Rate	Result
AC power ports	Live to Neutral	-0.5kV, -1.0kV	Negative	270 deg	5	60 sec	A
AC power ports	Live to Neutral	+0.5kV, +1.0kV	Positive	90 deg	5	60 sec	A
AC power ports	Live to Earth	-0.5kV, -1.0kV	Negative	270 deg	5	60 sec	A
AC power ports	Live to Earth	+0.5kV, +1.0kV	Positive	90 deg	5	60 sec	A
AC power ports	Neutral to Earth	-1.0kV, -2.0kV	Negative	270 deg	5	60 sec	A
AC power ports	Neutral to Earth	+2.0kV, +2.0kV	Positive	90 deg	5	60 sec	A
Remark	Nil						



Test Setup

2.9.8 Test Location

This test was carried out in EMS Test Location.

2.10 Voltage dips, short interruptions and voltage variations immunity test

2.10.1 Specification Reference

EN 61547:2009, Clause 5.8

2.10.2 Equipment Under Test

AOK-50WiP-NV-L3-00-6570-T5-P-I, AOK-75WiP-NV-L3-00-6570-T5-P-I,
AOK-120WiP-NV-L3-00-6570-T5-P-I, AOK-50WiPS-NVS-L3-00-6580-T4-A,
AOK-60WiPS-NVS-L3-00-6580-T4-A

2.10.3 Date of Test

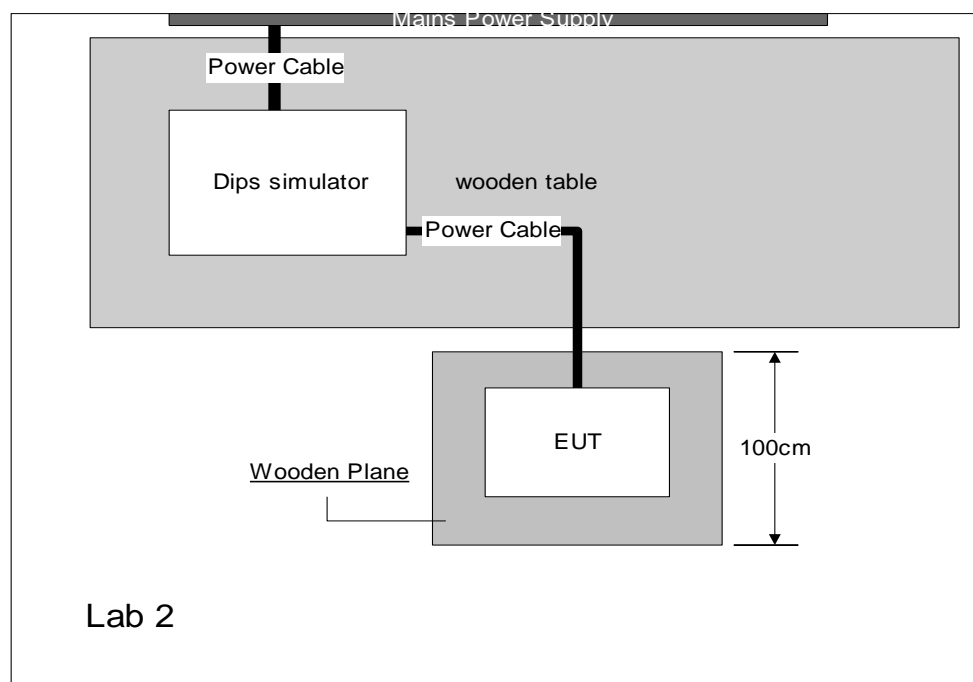
2019-01-04; 2020-01-17; 2020-04-09, 2022-05-24

2.10.4 Test Method

The equipment under test including associated cabling was configured, on a 0.8 m non-conductive table for table-top equipment and on a 0.1 m insulated support for floor standing equipment above a ground reference plane all within a test laboratory.

Using a programmable power supply the equipment under test was subjected to the detailed supply voltage dips and interruptions. The required supply phase synchronization and test repetition rate, detailed, was controlled by the programmable power supply.

During this testing any anomalies in the equipment under tests performance was recorded.





China

2.10.5 Environmental Conditions

Ambient Temperature 23.0 °C
 Relative Humidity 51.2 %
 Atmospheric Pressure 1019.0 mbar

2.10.6 Specification Limits

Required Test Levels			Performance Criteria
Test	Test Level	Duration	
Voltage Dip	0 % of Vnom	½ cycle	B
Voltage Dip	70 % of Vnom	10 cycles	C
Note EUT powered at one of the Nominal input voltages and frequencies			

2.10.7 Test Results

Results for Configuration and Mode: AC Powered/ ON.

Performance assessment of the EUT made during this test: Pass.

Detailed results are shown below.

Tabulated Results for Voltage Dip and Short Interruption					
Line under test	Vnom	Operating Frequency	Test Level	Duration	Result
power line	230 Vac	50 Hz	0% of Vnom	½ cycle	A
power line	230 Vac	50 Hz	70% of Vnom	10 cycles (50Hz)	B
Remark	Temporary degradation of performance during testing				



Test Setup

2.10.8 Test Location

This test was carried out in EMS Test Location.

3 Test Equipment Information

3.1 General Test Equipment Used

Radiated Emission Test 1# Test

DESCRIPTION	MANUFACTURER	MODEL NO.	EQUIPMENT ID	SERIAL NO.	CAL INTERVAL (YEAR)	CAL. DUE DATE
EMI Test Receiver	Rohde & Schwarz	ESR 7	68-4-74-19-001	102176	1	2022-6-4
Trilog Super Broadband Test Antenna	Schwarzbeck	VULB 9163	68-4-80-14-002	707	1	2022-7-23
Horn Antenna	Rohde & Schwarz	HF907	68-4-80-14-005	102294	1	2022-6-23
Loop Antenna	Rohde & Schwarz	HFH2-Z2	68-4-80-14-006	100398	1	2022-8-25
Pre-amplifier	Rohde & Schwarz	SCU 18	68-4-29-14-001	102230	1	2022-6-6
Attenuator	Agilent	8491A	68-4-81-16-001	MY39264334	1	2022-6-3
3m Semi-anechoic chamber	TDK	SAC-3 #1	68-4-90-14-001	----	2	2023-5-28
Test software	Rohde & Schwarz	EMC32	68-4-90-14-001-A10	Version10.35.02	N/A	N/A

Conducted Emission 2# Test

DESCRIPTION	MANUFACTURER	MODEL NO.	EQUIPMENT ID	SERIAL NO.	CAL INTERVAL (YEAR)	CAL. DUE DATE
EMI Test Receiver	Rohde & Schwarz	ESR 3	68-4-74-19-002	102590	1	2022-6-4
LISN	Rohde & Schwarz	ENV216	68-4-87-19-001	102472	1	2022-6-5
ISN	Rohde & Schwarz	ENY81	68-4-87-14-003	100177	1	2022-6-5
ISN	Rohde & Schwarz	ENY81-CA6	68-4-87-14-004	101664	1	2022-6-5
High Voltage Probe	Schwarzbeck	TK9420(VT9420)	68-4-27-14-001	9420-584	1	2022-6-5
RF Current Probe	Rohde & Schwarz	EZ-17	68-4-27-14-002	100816	1	2022-6-5
Attenuator	Shanghai Huaxiang	TS2-26-3	68-4-81-16-003	080928189	1	2022-6-3
Test software	Rohde & Schwarz	EMC32	68-4-90-19-005-A01	Version10.35.02	N/A	N/A
Shielding Room	TDK	CSR #2	68-4-90-19-005	----	1	2022-11-07

Radiated Electromagnetic Disturbance

DESCRIPTION	MANUFACTURER	MODEL NO.	EQUIPMENT ID	SERIAL NO.	CAL INTERVAL (YEAR)	CAL. DUE DATE
EMI Test Receiver	Rohde & Schwarz	ESR 3	68-4-74-19-002	102590	1	2022-6-4
Triple Loop Antenna	Rohde & Schwarz	HM020	68-4-80-14-001	100951	1	2022-6-6
Test software	Rohde & Schwarz	EMC32	68-4-90-19-005-A01	Version 10.35.02	N/A	N/A

Harmonic Test / Flicker Test

DESCRIPTION	MANUFACTURER	MODEL NO.	EQUIPMENT ID	SERIAL NO.	CAL INTERVAL (YEAR)	CAL. DUE DATE
Three Phase Harmonic flicker test system	CI	MX45-3PI-400-413-CTSHL-LF-SNK	68-4-74-14-006	1424A00547	1	2022-6-6
Test software	Ametek	CTSMXL	68-4-74-14-006-A11	Version 2.9.0&Version 2.24.0	N/A	N/A
Test software	Ametek	CTSMXH	68-4-74-14-006-A12	Version 2.10.0	N/A	N/A



China

Electrostatic Discharge Test

DESCRIPTION	MANUFACTURER	MODEL NO.	EQUIPMENT ID	SERIAL NO.	CAL INTERVAL (YEAR)	CAL. DUE DATE
Electrostatic Discharge Simulator	Noiseken	ESS-2002	68-4-75-14-007	ESS0615075	1	2022-6-21

Radiated Immunity Test

DESCRIPTION	MANUFACTURER	MODEL NO.	EQUIPMENT ID	SERIAL NO.	CAL INTERVAL (YEAR)	CAL. DUE DATE
Signal Generator	Rohde & Schwarz	SMB100A	68-4-48-14-002	177600	1	2022-6-3
Power Amplifier	Rohde & Schwarz	BBA100	68-4-28-14-001	101238	1	2022-6-3
Power Amplifier	Rohde & Schwarz	BBA150	68-4-28-14-002	101671	1	2022-6-2
Power Amplifier	Rohde & Schwarz	BBA150-E100	68-4-28-17-001	102640	1	2022-6-3
Log-Periodic Antenna	Rohde & Schwarz	HL046E	68-4-80-14-009	100160	1	N/A
Microwave Log-Periodic Antenna	Rohde & Schwarz	STLP 9149	68-4-80-17-001	9149-453	1	N/A
Power Meter	Rohde & Schwarz	NRP2	68-4-32-14-001	103497	1	2022-6-3
Average Power Sensor	Rohde & Schwarz	NRP-Z91	68-4-32-14-001-A01	102538	1	2022-6-3
Average Power Sensor	Rohde & Schwarz	NRP-Z91	68-4-32-14-001-A02	102539	1	2022-6-3
Starprobe Laser-Powered Probe	AMPLIFIER RESEARCH	FL7006/KIT	68-4-27-14-003	0433720	1	2022-7-27
Audio Analyzer	Rohde & Schwarz	UPV	68-4-74-18-001	104348	1	2022-10-10
Fully Anechoic Chamber	TDK	8X4X4	68-4-90-14-002	--	3	2023-9-2
Test software	Rohde & Schwarz	EMC32	68-4-90-14-002-A11	Version 9.15.03	N/A	N/A

Electrical Fast Transients Test

DESCRIPTION	MANUFACTURER	MODEL NO.	EQUIPMENT ID	SERIAL NO.	CAL INTERVAL (YEAR)	CAL. DUE DATE
Immunity simulator	EMTEST	UCS 500N7	68-4-75-14-001	P1313116005	1	2022-6-5
7kV Coupling network 3-phase	EMTEST	CNI 503B5	68-4-75-14-001-A07	P1425134991	1	2022-6-5
Capacitive Coupling Clamp	EMTEST	HFK	68-4-75-14-001-A01	P1426135389	1	2022-6-5
Test software	EMTEST	iec.control	68-4-75-14-001-A10	Version 5.3.1	N/A	N/A

Surges Test

DESCRIPTION	MANUFACTURER	MODEL NO.	EQUIPMENT ID	SERIAL NO.	CAL INTERVAL (YEAR)	CAL. DUE DATE
Immunity simulator	EMTEST	UCS 500N7	68-4-75-14-001	P1313116005	1	2022-6-5
7kV Coupling network 3-phase	EMTEST	CNI 503B5	68-4-75-14-001-A07	P1425134991	1	2022-6-5
Telecom Surge Module	EMTEST	Tsurge 7	68-4-75-14-001-A08	P1420134206	1	2022-6-5
4kV coupling/decoupling network	EMTEST	CNV 504 N1	68-4-75-14-001-A02	P1420134192	1	2022-6-5
4kV CDN for 8 telecom lines	EMTEST	CNV 508 S1	68-4-75-14-001-A03	P1431137565	1	2022-6-5
Test software	EMTEST	iec.control	68-4-75-14-001-A10	Version 5.3.1	N/A	N/A



China

Conducted Immunity Test

DESCRIPTION	MANUFACTURER	MODEL NO.	EQUIPMENT ID	SERIAL NO.	CAL INTERVAL (YEAR)	CAL. DUE DATE
Continuous Wave Simulator	EMTEST	CWS 500N1	68-4-75-14-002	P1420134224	1	2022-10-10
Attenuator	EMTEST	ATT6/80	68-4-75-14-002-A01	P1402129090	1	2022-6-3
CDN	EMTEST	CDN-M2/M3	68-4-75-14-002-A02	P1420134163	1	2022-6-5
CDN	EMTEST	CDN-M4	68-4-75-14-002-A03	P1346125919	1	2022-6-5
Electromagnetic Injection Clamp	EMTEST	EM101	68-4-75-14-002-A04	P1411132453	1	2022-6-5
Test software	EMTEST	icd.control	68-4-75-14-002-A10	Version 5.2.9	N/A	N/A

Voltage Dips and Interruptions Test

DESCRIPTION	MANUFACTURER	MODEL NO.	EQUIPMENT ID	SERIAL NO.	CAL INTERVAL (YEAR)	CAL. DUE DATE
Immunity simulator	EMTEST	UCS 500N7	68-4-75-14-001	P1313116005	1	2022-6-5
Motorized Variac	EMTEST	MV2616	68-4-75-14-001-A04	P1401128623	1	2022-6-5
Switch-Box for phase by phase	EMTEST	PFLS 32N1	68-4-75-14-001-A09	P1251107106	N/A	N/A
Test software	EMTEST	iec.control	68-4-75-14-001-A10	Version 5.3.1	N/A	N/A

4 Measurement Uncertainty

For a 95% confidence level, the measurement uncertainties for defined systems are:

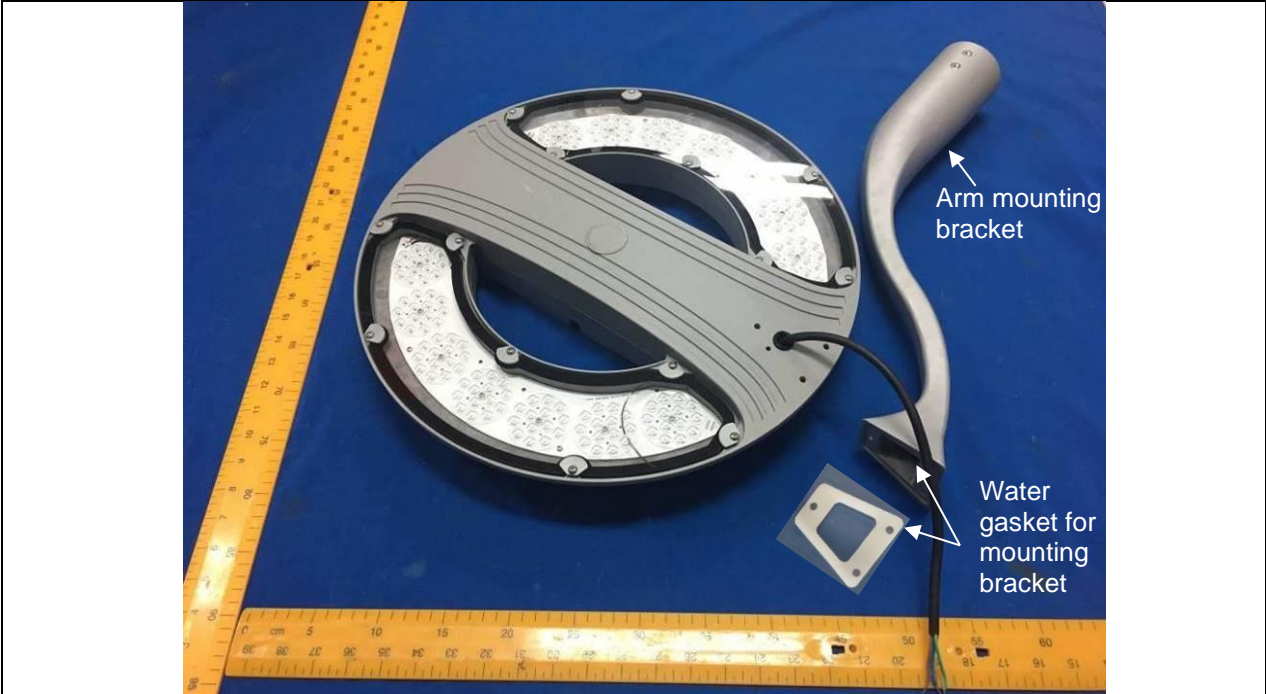
System Measurement Uncertainty	
Test Items	Extended Uncertainty
Uncertainty for Radiated Emission in 3m chamber 30MHz-1000MHz	Horizontal: 4.63dB; Vertical: 4.61dB
Uncertainty for Conducted Emission in new shielding room (68-4-90-19-005) 9kHz-150KHz	3.64dB
Uncertainty for Conducted Emission in new shielding room (68-4-90-19-005) 150kHz-30MHz (for test using AMN ENV216)	3.20dB
Uncertainty for Radiated Electromagnetic Disturbance in shielding room () 9KHz-30MHz	3.21dB
Uncertainty for Harmonic test	3.15%
Uncertainty for RS test	49%, K=2
Uncertainty for CS test	28%(CDN), 45%(EM Clamp) K=2
Uncertainty for ESD test	The immunity measurement system uncertainty is within standard requirement and is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%.
Uncertainty for EFT test	
Uncertainty for Surges test	
Uncertainty for Voltage Dips, Voltage Variations and Short Interruptions Test	

Measurement Uncertainty Decision Rule

Determination of conformity with the specification limits is based on the decision rule according to IEC Guide 115: 2007, clause 4.4.3 and 4.5.1.

5 Photographs

Details of: Outlook with lamp arm mounting bracket for all models
Representative model: AOK-120WiP-NV-L3-00-6570-T5-P-I



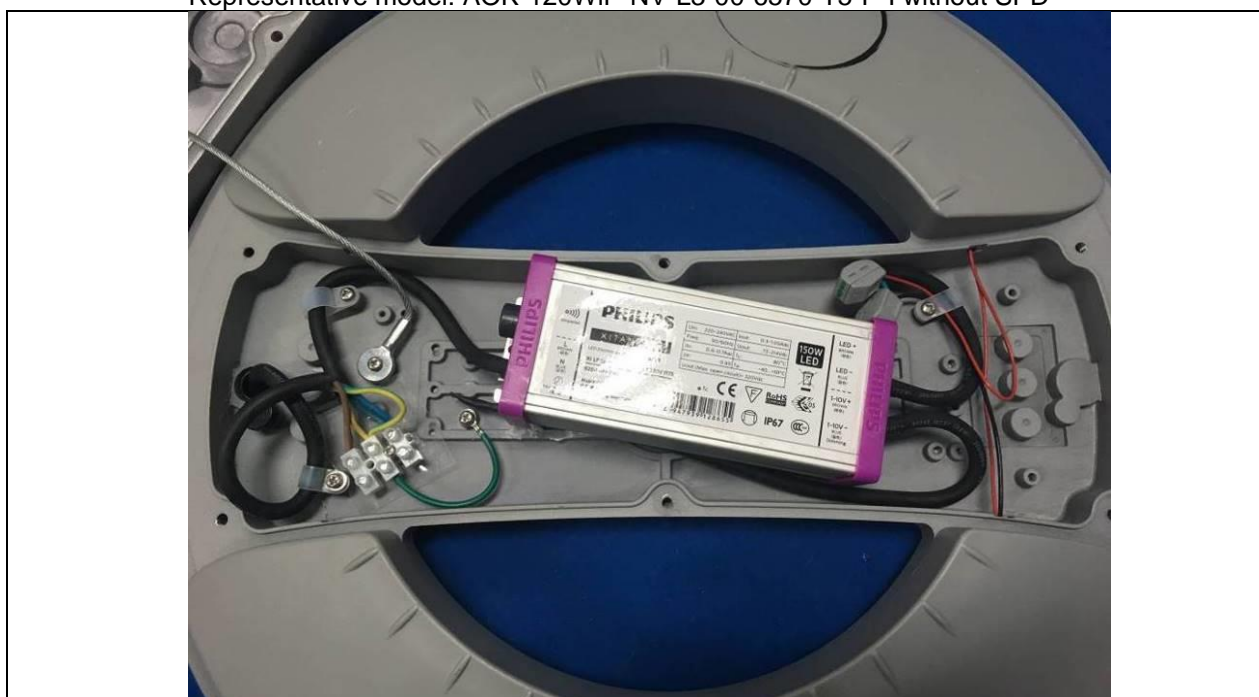
Details of: Back view with lamp arm mounting bracket for all models
Representative model: AOK-120WiP-NV-L3-00-6570-T5-P-I



Details of: Internal view with lamp arm mounting bracket for all models
Representative model: AOK-120WiP-NV-L3-00-6570-T5-P-I without SPD

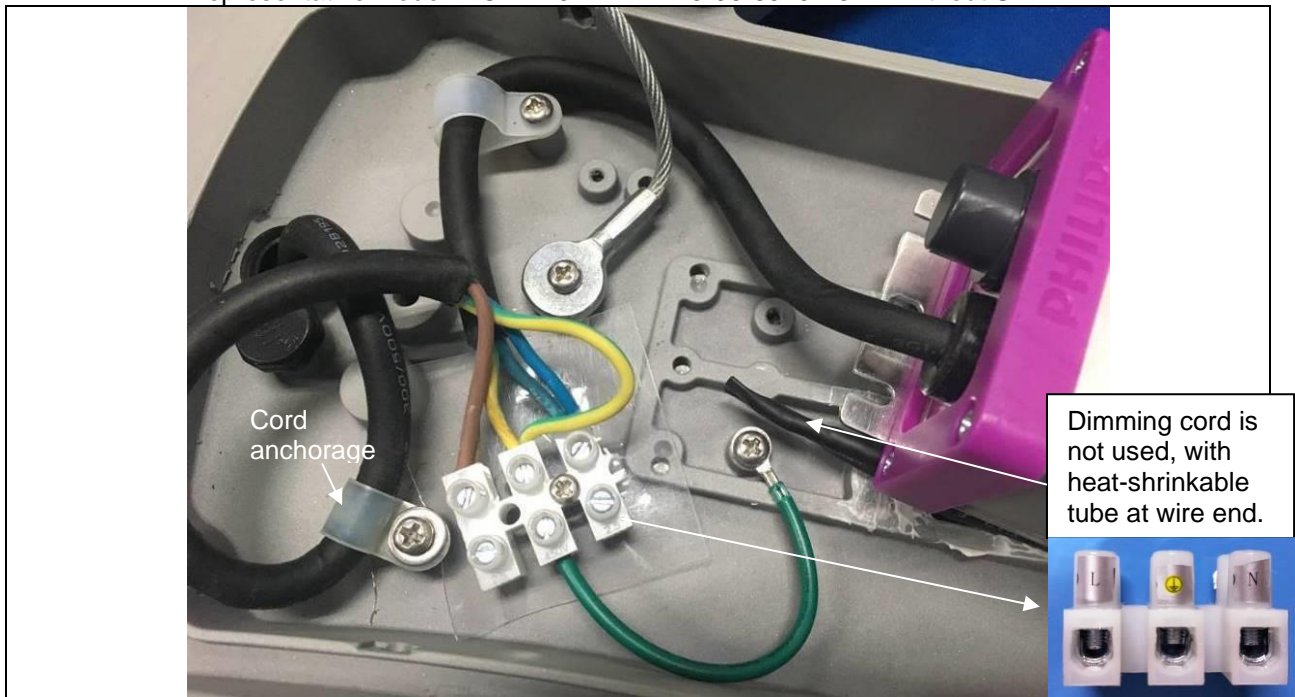


Details of: Internal view with lamp arm mounting bracket for all models
Representative model: AOK-120WiP-NV-L3-00-6570-T5-P-I without SPD



Details of: Internal view with lamp arm mounting bracket for all models

Representative model: AOK-120WiP-NV-L3-00-6570-T5-P-I without SPD



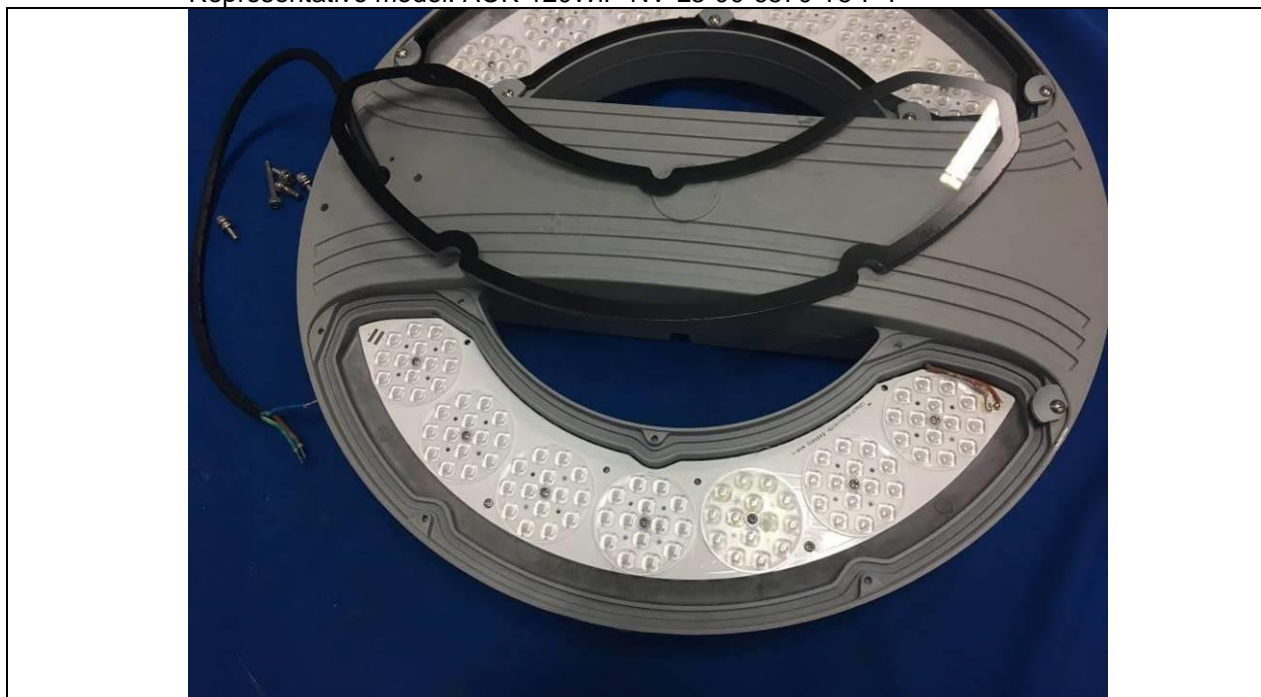
Details of: LED module view for all models

Representative model: AOK-120WiP-NV-L3-00-6570-T5-P-I



Details of: LED module view for all models

Representative model: AOK-120WiP-NV-L3-00-6570-T5-P-I



Details of: LED module view for all models

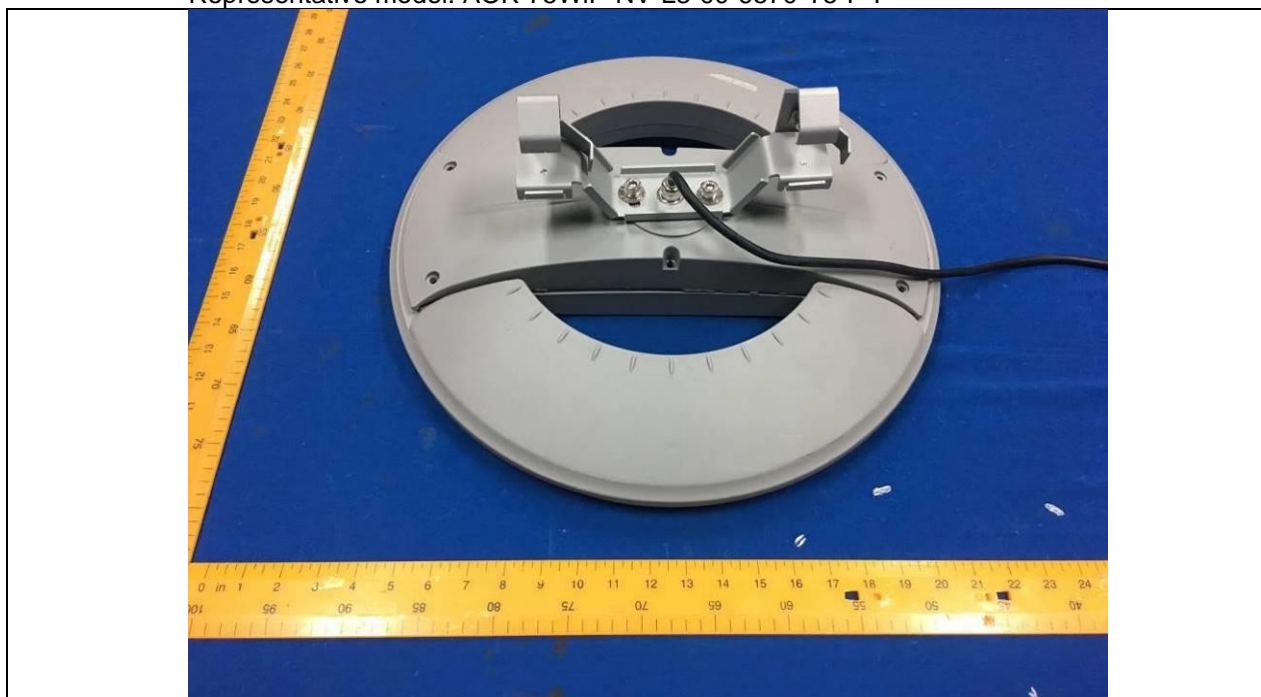
Representative model: AOK-120WiP-NV-L3-00-6570-T5-P-I



Details of: Outlook with lifting scaffold mounting bracket for all models
Representative model: AOK-75WiP-NV-L3-00-6570-T5-P-I



Details of: Back view with lifting scaffold mounting bracket for all models
Representative model: AOK-75WiP-NV-L3-00-6570-T5-P-I



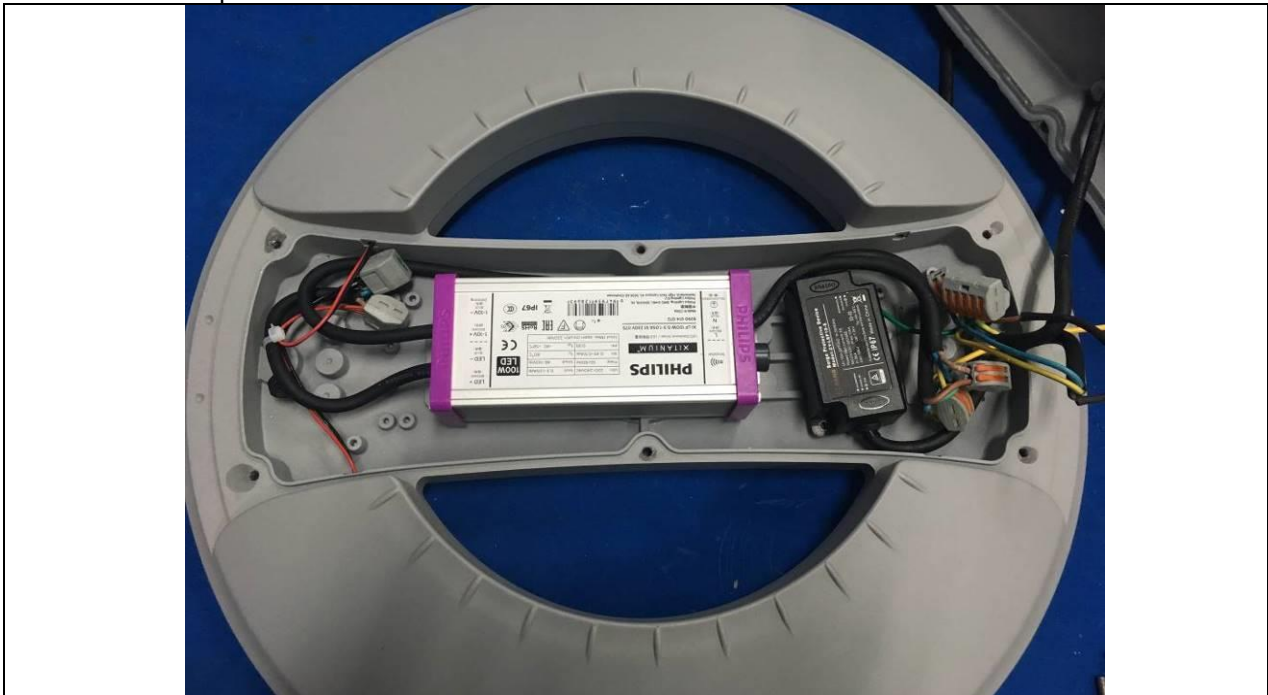
Details of: Gland as cord anchorage with lifting scaffold mounting bracket for all models
Representative model: AOK-75WiP-NV-L3-00-6570-T5-P-I



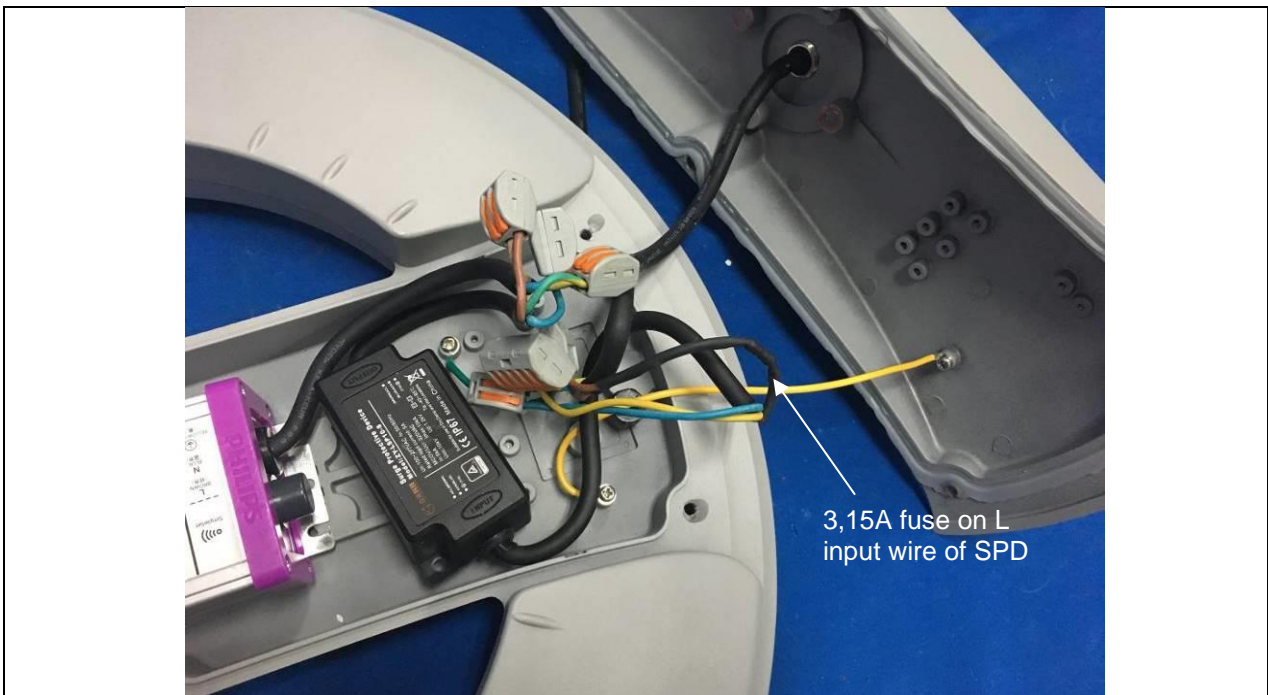
Details of: Internal view with lifting scaffold mounting bracket for all models
Representative model: AOK-75WiP-NV-L3-00-6570-T5-P-I with SPD



Details of: Internal view with lifting scaffold mounting bracket for all models
Representative model: AOK-75WiP-NV-L3-00-6570-T5-P-I with SPD



Details of: SPD view and earthing connection



Details of: Fuse before SPD



Details of: LED module view

Representative model: AOK-75WiP-NV-L3-00-6570-T5-P-I





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Details of: LED module view
Representative model: AOK-75WiP-NV-L3-00-6570-T5-P-I



Details of: LED driver view
Xi LP 150W 0.3-1.05A S1 230V 1175





China

Details of: LED driver view
Xi LP 100W 0.3-1.05A S1 230V 1175



Details of: LED driver view
LED driver XLG-50-AB





China

Details of: LED driver view
LED driver XLG-75-H-AB



Details of: LED driver view
XLG-150-H-AB





China

Details of: LED driver view
SS-75VP-56DH



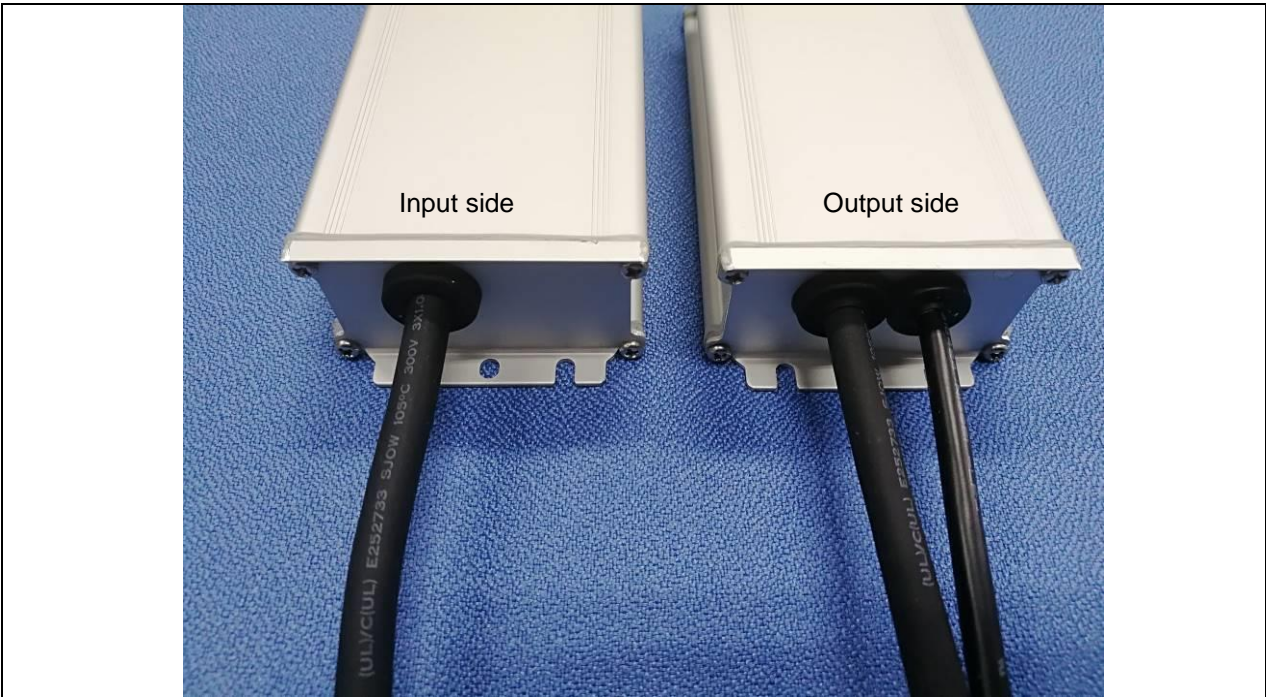
Details of: LED driver view
SS-50VP-56DH





China

Details of: LED driver view
SS-50VP-56DH



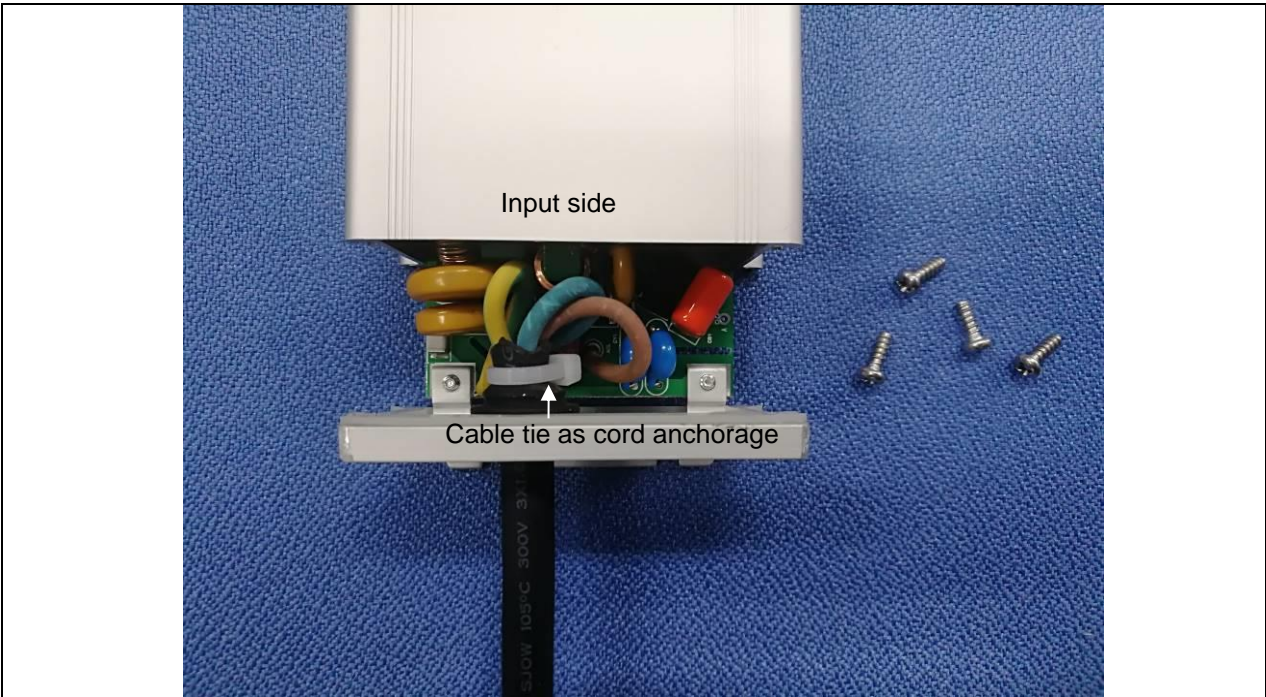
Details of: LED driver view
SS-50VP-56DH



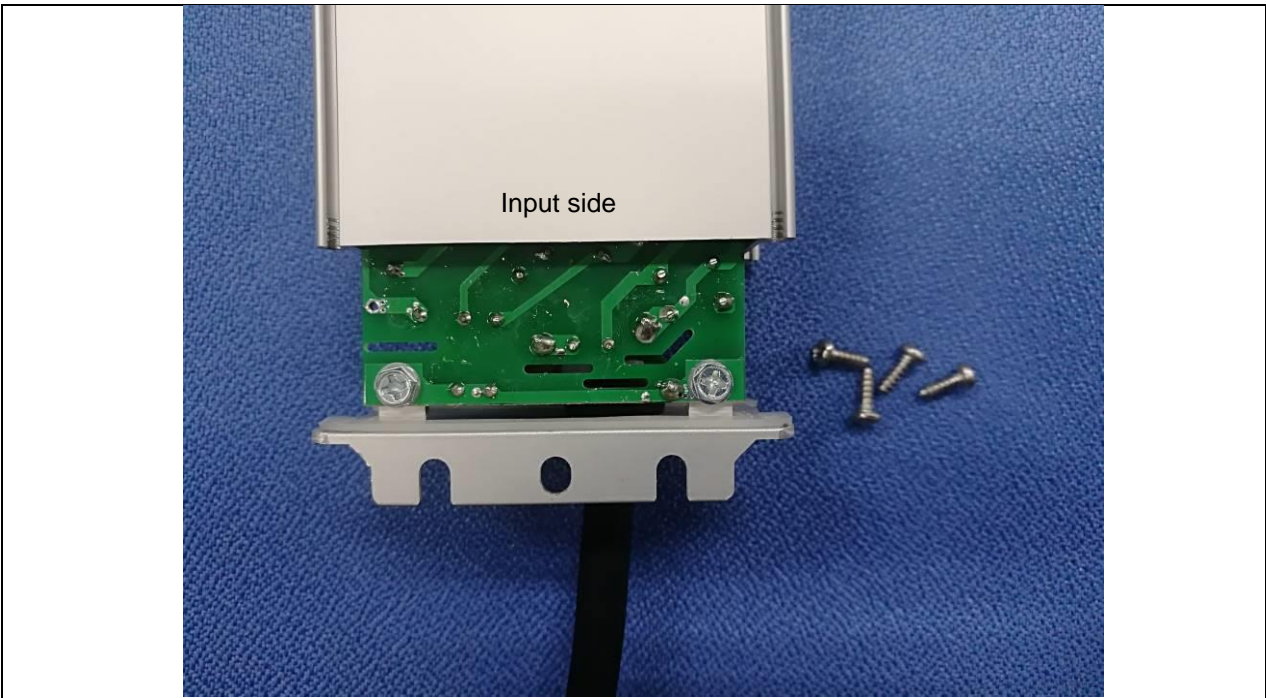


China

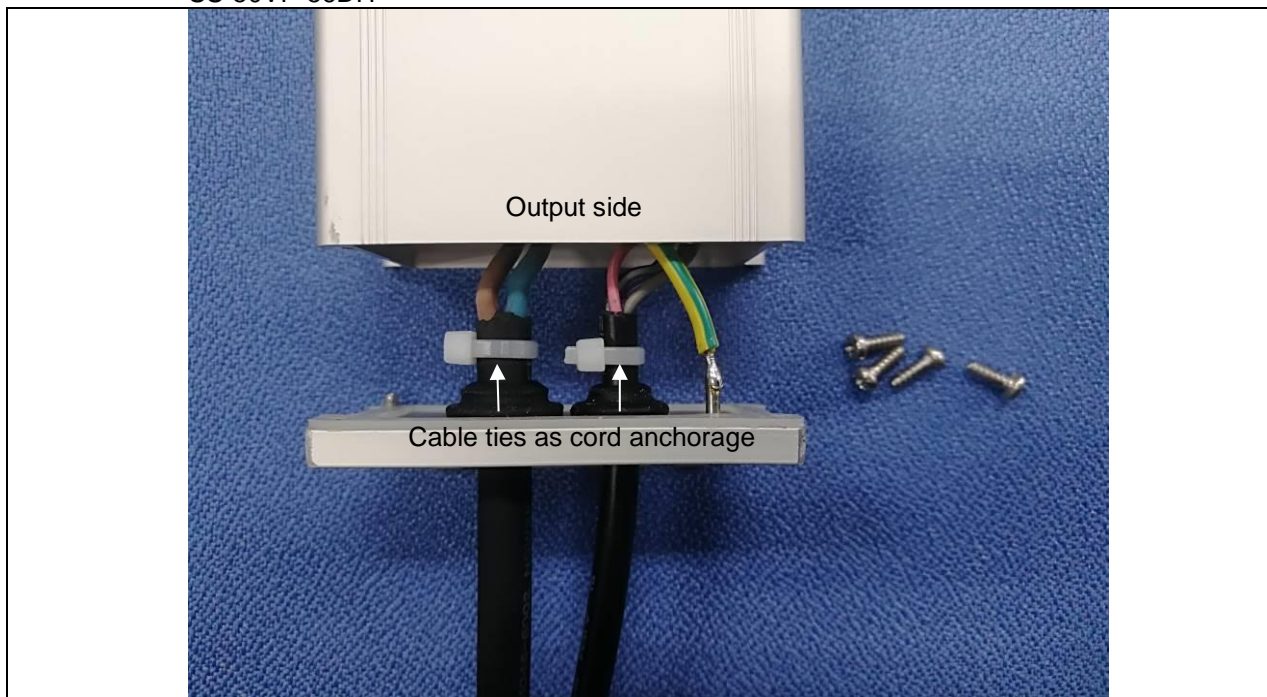
Details of: LED driver view
SS-50VP-56DH



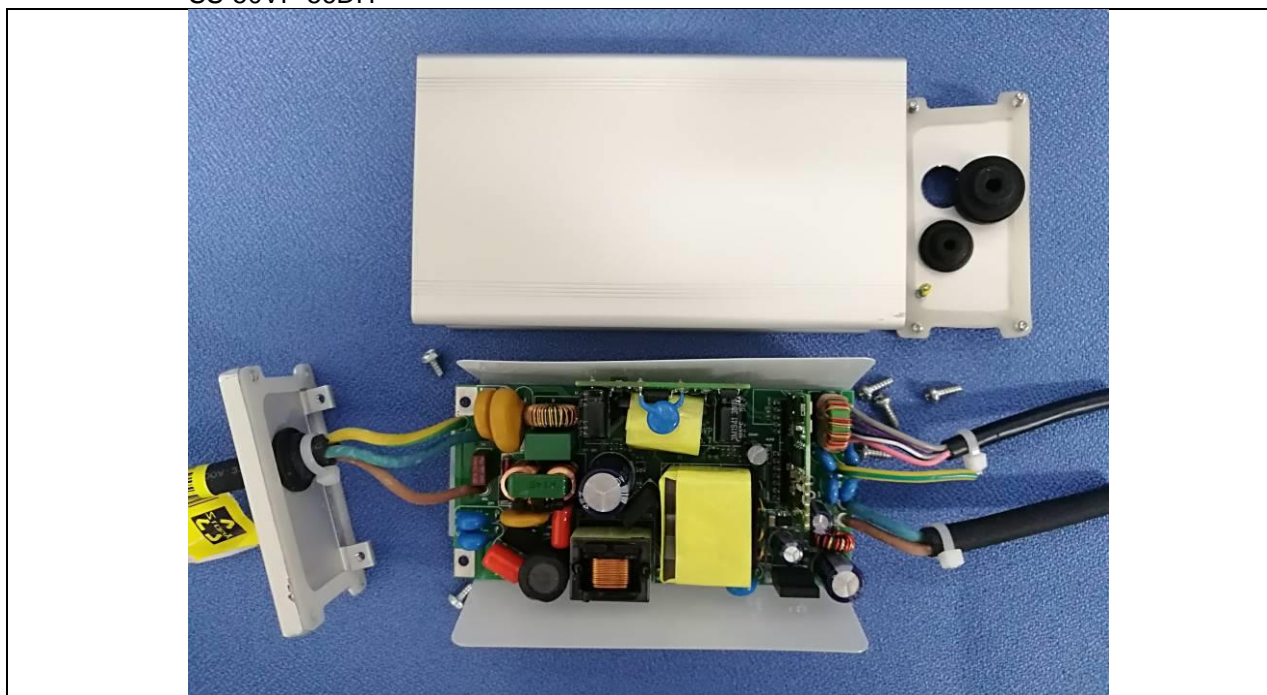
Details of: LED driver view
SS-50VP-56DH



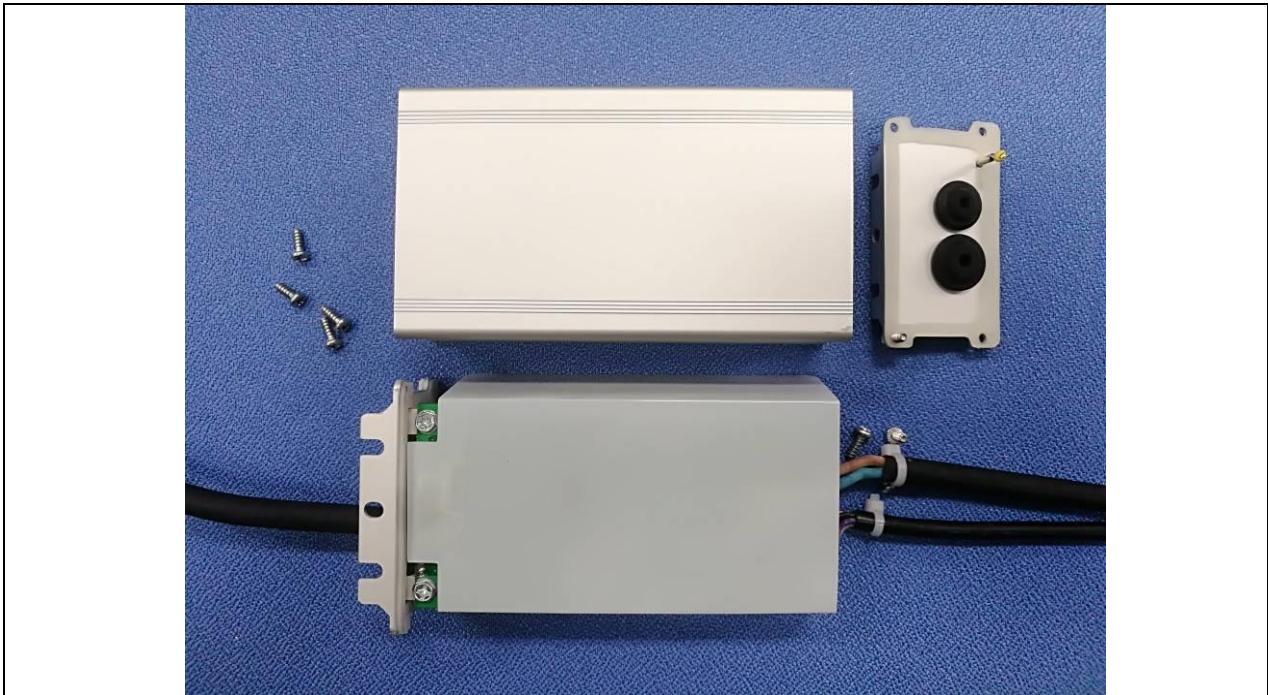
Details of: LED driver view
SS-50VP-56DH



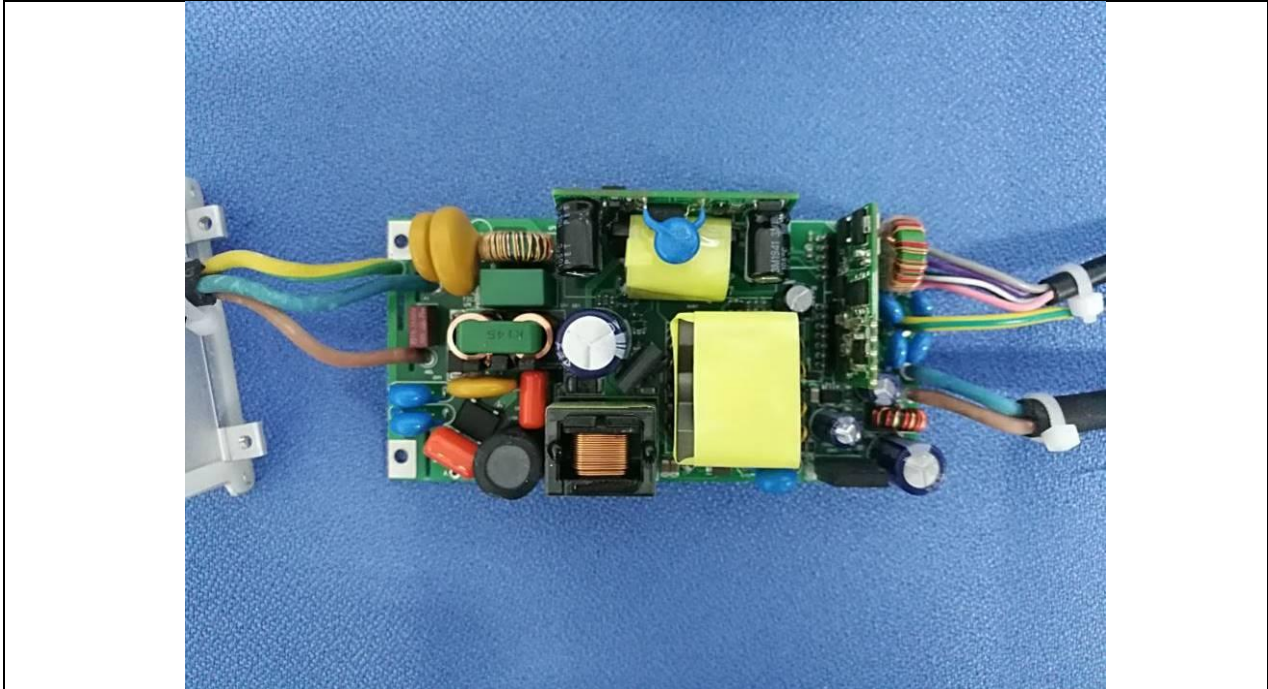
Details of: LED driver view
SS-50VP-56DH



Details of: LED driver view
SS-50VP-56DH



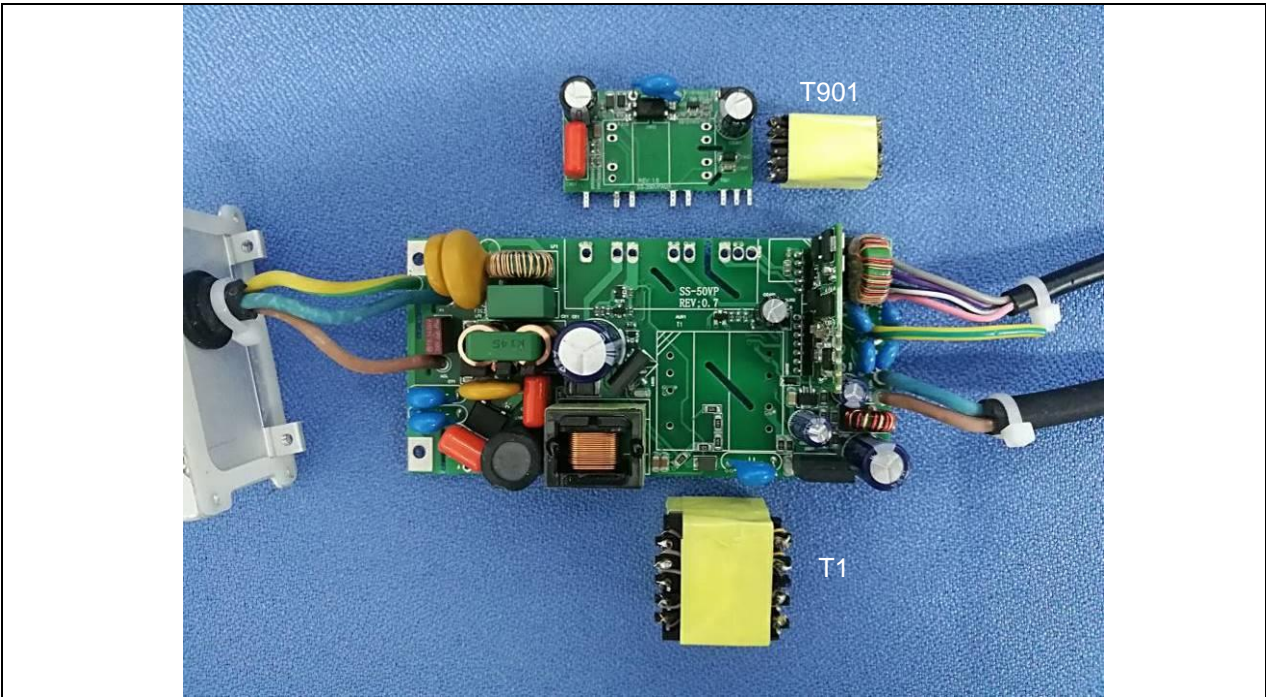
Details of: LED driver view
SS-50VP-56DH



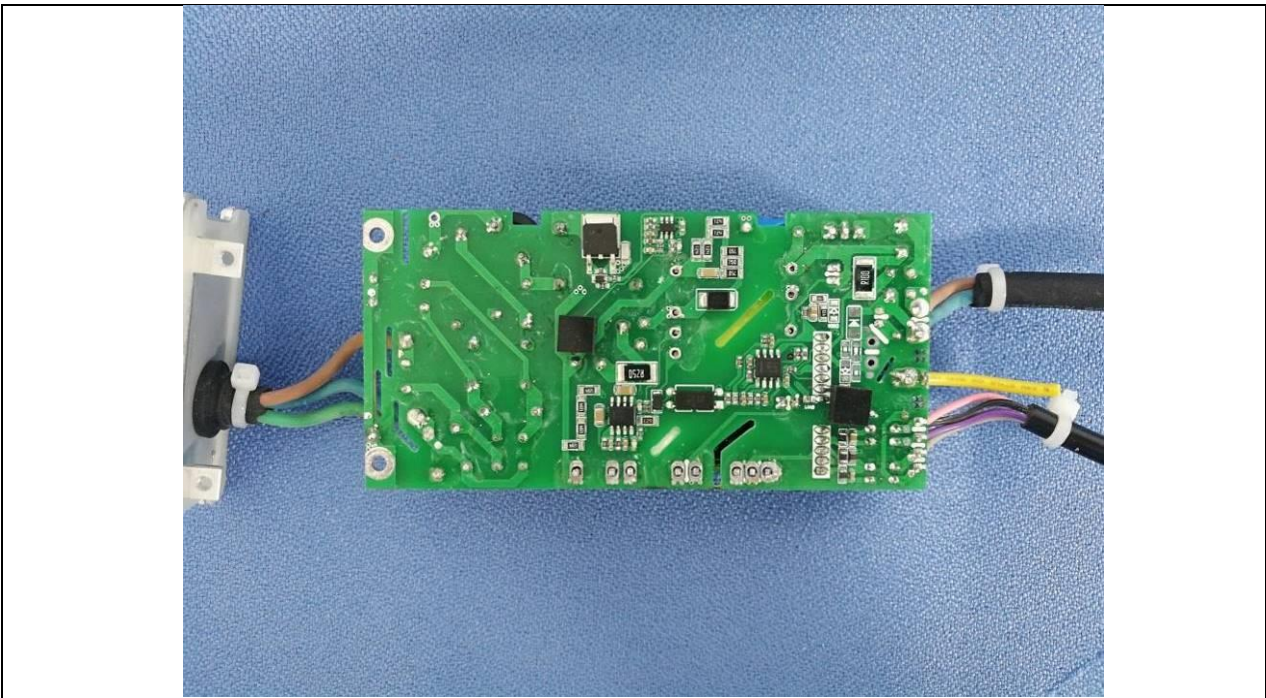


China

Details of: LED driver view
SS-50VP-56DH



Details of: LED driver view
SS-50VP-56DH



Details of: Transformer (T901) view
SS-50VP-56DH



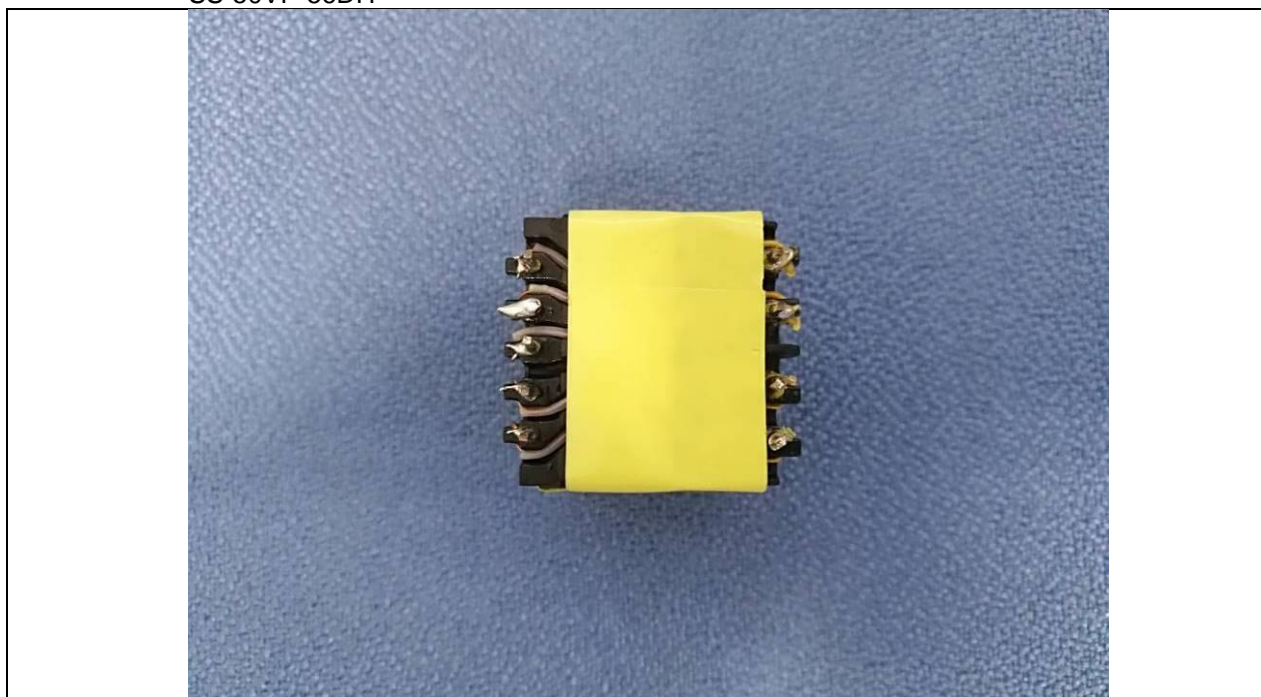
Details of: Transformer (T901) view
SS-50VP-56DH



Details of: Transformer (T1) view
SS-50VP-56DH



Details of: Transformer (T1) view
SS-50VP-56DH





China

Details of: LED driver view (SS-30VA-56/B)



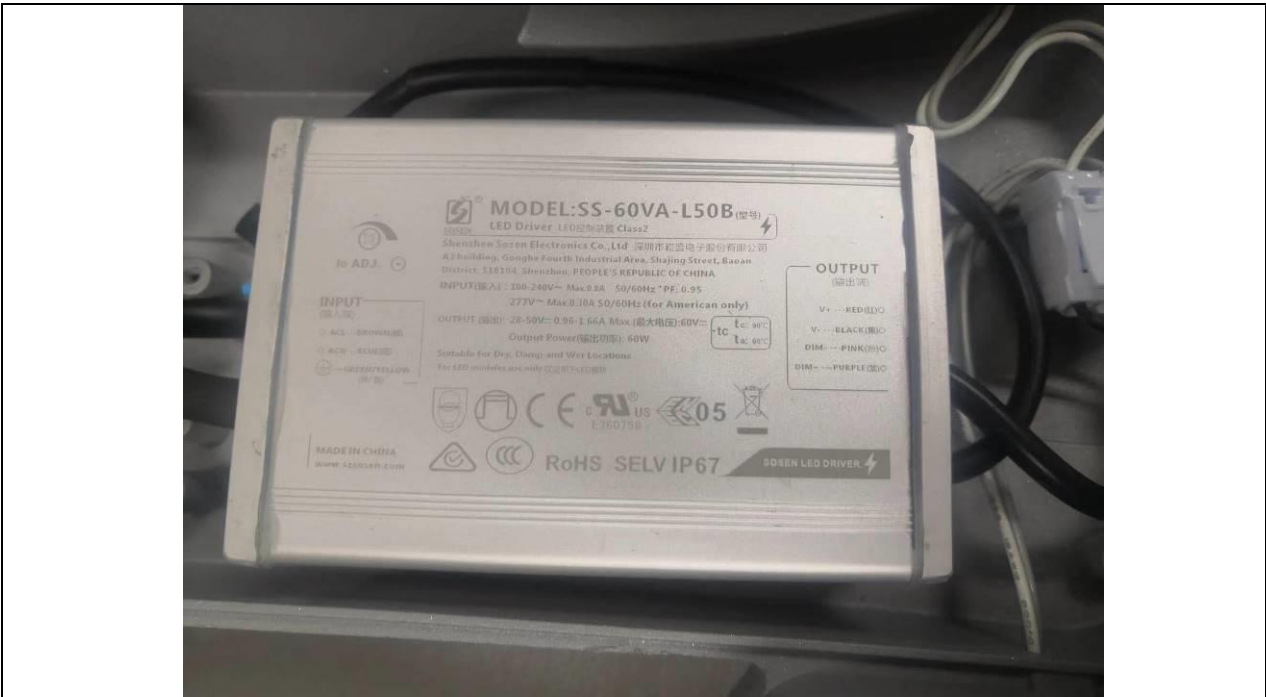
Details of: LED driver view (SS-50VA-56/B)





China

Details of: LED driver view (SS-60VA-L50B)



THE END